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ABSTRACT

This publication contains statistics and projections for elementary and secondary schools and institutions of higher education in the United States, based on data compiled by the National Center for Education Statistics. Included are a variety of tables presenting enrollment, teacher, graduate, and expenditure data for the years 1964-75 and projections for the years 1975-85. Chapter 1 offers a brief introduction to the volume and presents several summary tables of data and projections for the period 1964-85. Chapter 2 includes tables on enrollment in elementary and secondary schools and institutions of higher education. Chapter 3 includes tables on numbers of high school graduates and on degrees granted by institutions of higher education. Chapter 4 includes tables on elementary and secondary teachers and on faculty members of institutions of higher education. Chapter 5 includes tables on expenditures for elementary and secondary schools and institutions of higher education. Chapter 6 includes tables on student charges by institutions of higher education. In each chapter, the tables are preceded by detailed explanations of inclusions, exclusions, and descriptions of data and projection methods. (Author/JG)

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Projections of Education Statistics to 1984-85

AMERICAN REVOLUTION BICENTENNIAL
1776-1976

EA 008 012

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE / Education Division

HIGHLIGHTS

If present trends continue, changes can be expected in—

- ☐ Enrollment in all regular public and private elementary and secondary day schools:
  - From 49.8 million in 1974 to 44.8 million in 1984.
- ☐ Degree-credit enrollment in institutions of higher education:
  - From 9.0 million in 1974 to 9.8 million in 1984.
- ☐ High school graduates from all public and private secondary day schools:
  - From 3.1 million in 1974–75 to 2.7 million in 1984–85.
- Bachelor's degrees granted by institutions of higher education:
  - From 944,000 in 1974–75 to 1,076,000 in 1984–85.
- ☐ Full-time-equivalent teachers in all regular public and private elementary and secondary schools:
  - From 2,387,000 in 1974 to 2,360,000 in 1984.
- ☐ Full-time-equivalent instructional staff for resident courses in institutions of higher education:
  - From 493,000 in 1974 to 541,000 in 1984.
- ☐ Total expenditures of all regular public and private elementary and secondary schools:
  - From $68.2 billion in 1974–75 to $70.1 billion in 1984–85 (in 1974–75 dollars).
- ☐ Total expenditures of institutions of higher education:
  - From $40.2 billion in 1974–75 to $52.2 billion in 1984–85 (in 1974–75 dollars).

NCES 76-210

Projections of Education Statistics to 1984-85

by
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and
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National Center for
Education Statistics

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
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FOREWORD

This publication provides projections of statistics for elementary and secondary schools and institutions of higher education. The statistics include enrollments, graduates, teachers, and expenditures. These projections, which supersede those shown in *Projections of Educational Statistics to 1983–84*, 1974 edition, are based mainly on 1964–65 to 1974–75 National Center for Education Statistics data and cover the period 1975–76 to 1984–85 for the United States. Table 1 is a summary of these projections and is available separately in a pocket-sized folder as *Statistics of Trends in Education, 1964–65 to 1984–85*, 1974 edition. Many of these data are available by State for 1974–75 in the National Center for Education Statistics publication *Digest of Educational Statistics*, 1975 edition.

The projections shown here assume, primarily, that the past 11 years' trends in enrollment rates, retention rates, class sizes, and per-pupil expenditures will continue through 1984–85. Further information about projected changes and the assumptions on which these are based are shown in the main body of this report. Details of the methodology supporting these projections are in the appendixes.

Marjorie O. Chandler, Acting Director
Division of Statistical Information
and Studies

SPECIAL NOTE

In November 1975, the National Center for Education Statistics released national estimates of total degree-credit and non-degree-credit enrollment in institutions of higher education. These data were not available in time to be included in this publication.

The estimate for fall 1975 total degree-credit and non-degree-credit enrollment is 11.1 million, a 10-percent increase over the fall 1974 figure of 10.2 million. The projection in table 5 of this publication for fall 1975 total degree-credit and non-degree-credit enrollment is 10.6 million.

At the present time it is uncertain what portent this unexpectedly high enrollment figure will hold for future enrollments in institutions of higher education. Before any assumptions can be made about future enrollments we need to analyze the composition of the 11.1 million students enrolled in fall 1975, especially their degree-credit status and attendance status, and the number of first-time degree-credit students.

This information will be forthcoming in the fall 1975 NCES survey of enrollment in institutions of higher education.

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CHAPTER I

Introduction and Summary

This is the twelfth in a series of annual projections of data on education, revised each year in order to take account of current information and emerging trends.

The publication contains a variety of tables presenting enrollment, teacher, graduate, and expenditure data for the past 11 years and projections for the next 10 years: chapter II. tables of enrollment in elementary and secondary schools and in institutions of higher education; chapter III, tables of numbers of high school graduates and of degrees granted by higher education institutions (degrees by level and sex and by major fields of study are included); chapter IV, tables of classroom teachers in elementary and secondary schools and of faculty in institutions of higher education; chapter V, tables of expenditures for elementary and secondary schools and for institutions of higher education; chapter VI, tables of student charges by institutions of higher education. Footnotes to the tables provide (1) assumptions underlying the projections, (2) published sources of the data (usually National Center for Education surveys), and (3) references to tables and other data in the appendixes. In each chapter, the tables are proceded by detailed explanations of inclusions, exclusions, and descriptions of data and projection methods.

Appendix tables A1 through A5 give detailed technical explanations of projection methods for their respective chapters in the main body of the publication. Appendix A also includes detailed estimation methods, classification changes, and a glossary of terms. Appendix B contains tables of population projections, alternative enrollment projections for elementary and secondary schools, and other tables of data used in making projections.

The statistical universe from which the enrollment and other educational data were drawn consists of (1) the public school districts which report to their respective State departments of education, (2) the nonpublic grade schools included in the Nonpublic School Directory of the National Center for Education Statistics,[1] and (3) the institutions of higher education meeting the requirements for inclusion in the Higher Education Directory of the National Center for Education Statistics.[2] The coverage is for the 50 States and the District of Columbia and excludes extension centers of U.S. educational institutions abroad.

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[1] U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Nonpublic School Directory, Elementary and Secondary Day Schools, 1968–69* (Washington, D.C.: U.S. Government Printing Office, 1970).

[2] U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Education Directory, 1974–75, Higher Education* (Washington, D.C.: U.S. Government Printing Office, 1975).

Enrollment projections in this publication are based essentially on trends in enrollment rates of the population over the past 11 years and on projected population groups from which enrollment will be drawn in the next 10 years. Projections of earned degrees, teachers and faculty, and expenditures are to a large extent based on enrollment projections.

There are different lag relationships between enrollments and those statistics whose projections are based on enrollments. Therefore, some projections at the beginning of the projected period are based on reported enrollments, while projections of the same statistics later in the projected period are based on projected enrollments. In general, projections based on reported data are more reliable than projections based on projected data. However, the strength of the relationships between the statistics being projected and the data that the projections are based on also plays an important role in determining the reliability of projections. The footnotes to each table give detailed information on the assumptions used to make projections and on the data on which the projections are based.

It should be noted that figures for the next 10 years are referred to as projections and not as forecasts or predictions. The approach followed is to apply mathematically the most recent trends to demographic data and to extrapolate the trends into the future. Where trends are changing, assumptions deemed most reasonable are made. There is, of course, no universal agreement on what are the most reasonable assumptions, and, therefore, the methods and data used to make these projections are shown in detail so that readers who wish to make other assumptions will be able to derive their own projections.

A word of explanation is in order at this point. No claim is made here for any particular theory to explain the observed trends, nor is there any advocacy for any policy changes. It is believed that projections are useful and constitute the baseline for other analyses.

This is the first edition that includes projections of elementary and secondary enrollment based on the series II population projection of the Bureau of the Census. The series II population projection, which assumes that the ultimate completed cohort fertility will be 2.1 births per woman, was selected because this assumption most closely agrees with the most recent fertility and expected fertility data. The series II projection is of interest, also, because at 2.1 births per woman and without migration the population would replace itself after enough time had elapsed for the age structure to stablilze.

The interaction of enrollment rates and population age groups determines, directly or indirectly, the numbers expected in the different areas of education. The numbers expected are shown graphically for the principal areas of education in figures 1 through 9 and, in more detail, with percentage increases from 1964 to 1974 and from 1974 to 1984, in table 1.

Figure 1. Enrollment in grades K-12 of regular day schools, by institutional control and organizational level: United States, fall 1964 to 1984

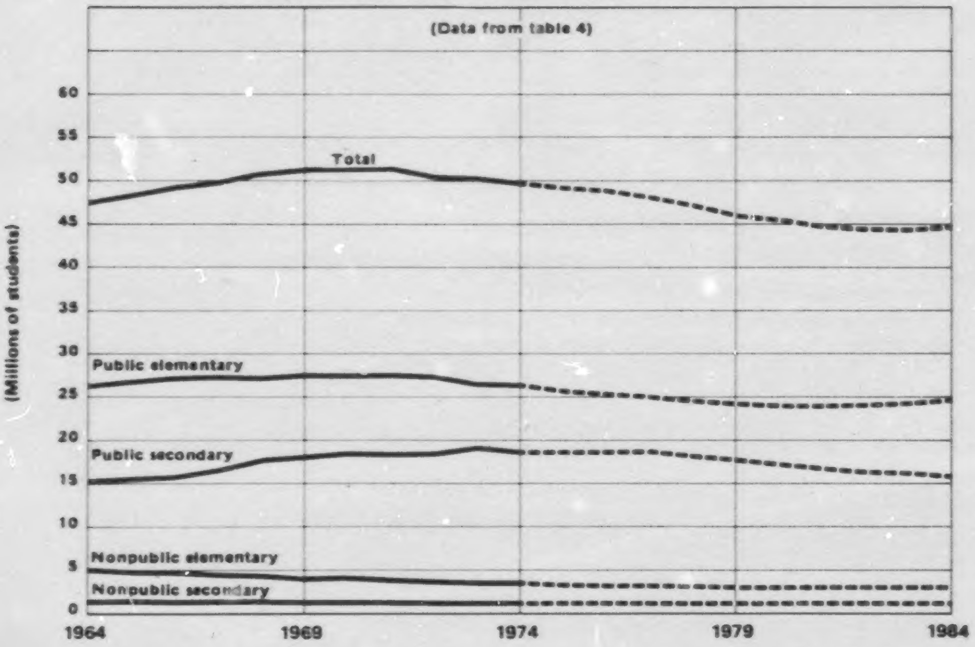

Figure 2. Total degree-credit enrollment in institutions of higher education, by control and type of institution: United States, fall 1964 to 1984

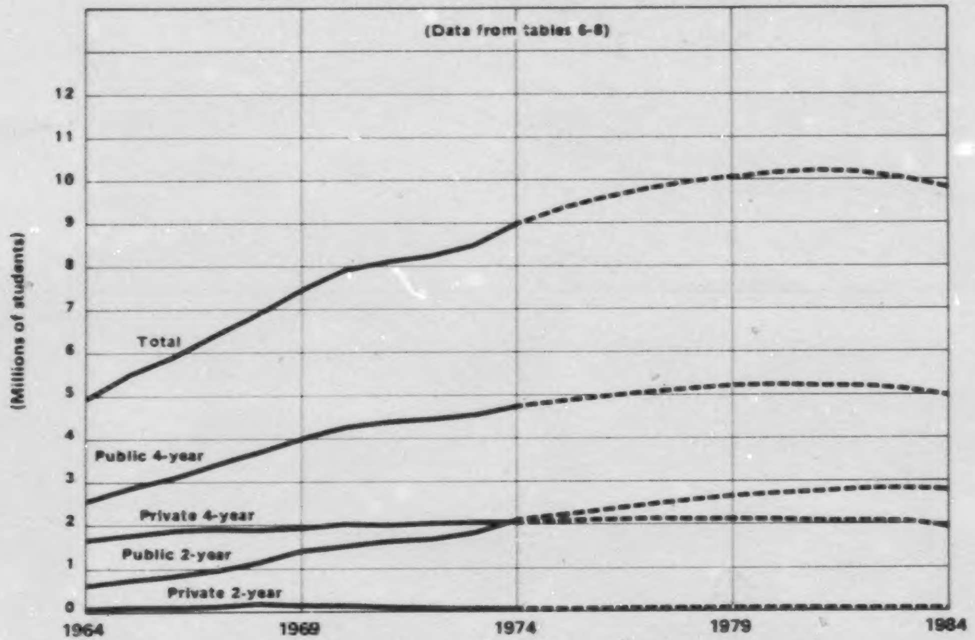

Figure 3. High school graduates: United States, 1964-65 to 1984-85

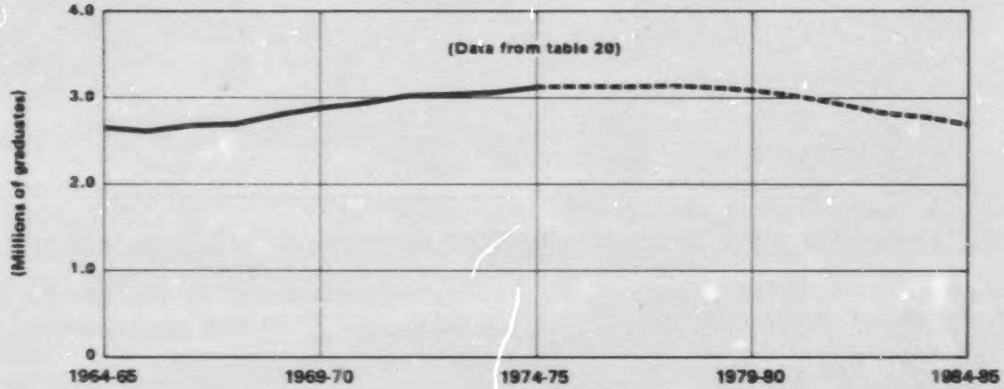

Figure 4. Earned degrees, by level: United States, 1964-65 to 1984-85

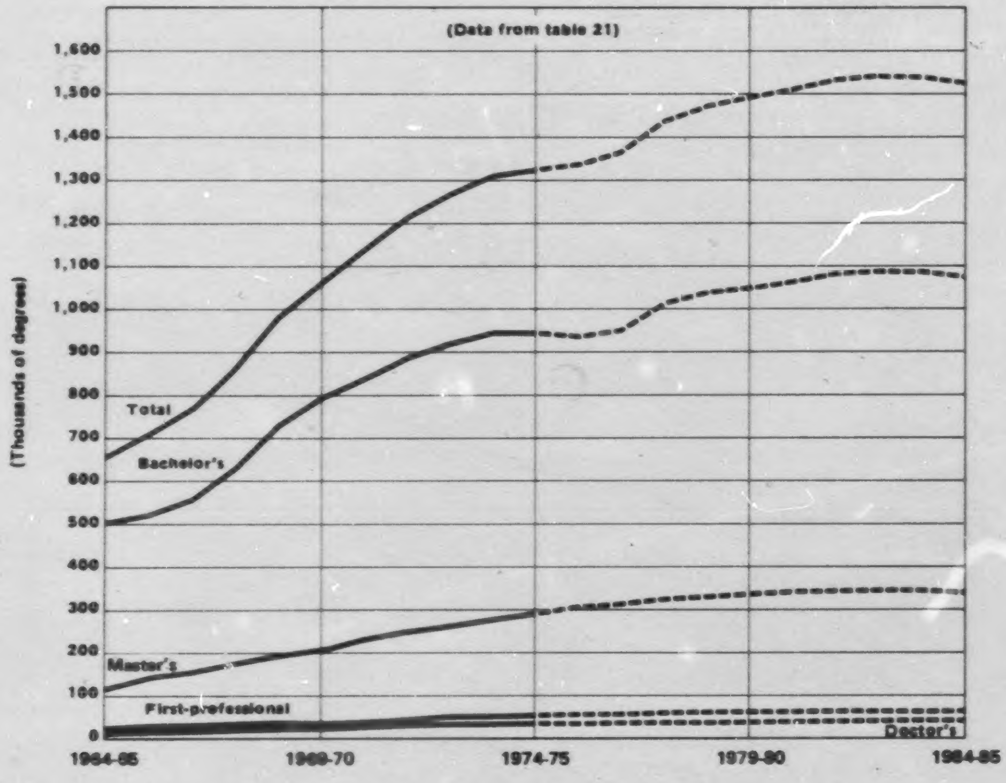

Figure 5. Classroom teachers in regular elementary and secondary day schools, by institutional control and organizational level: United States, fall 1964 to 1984

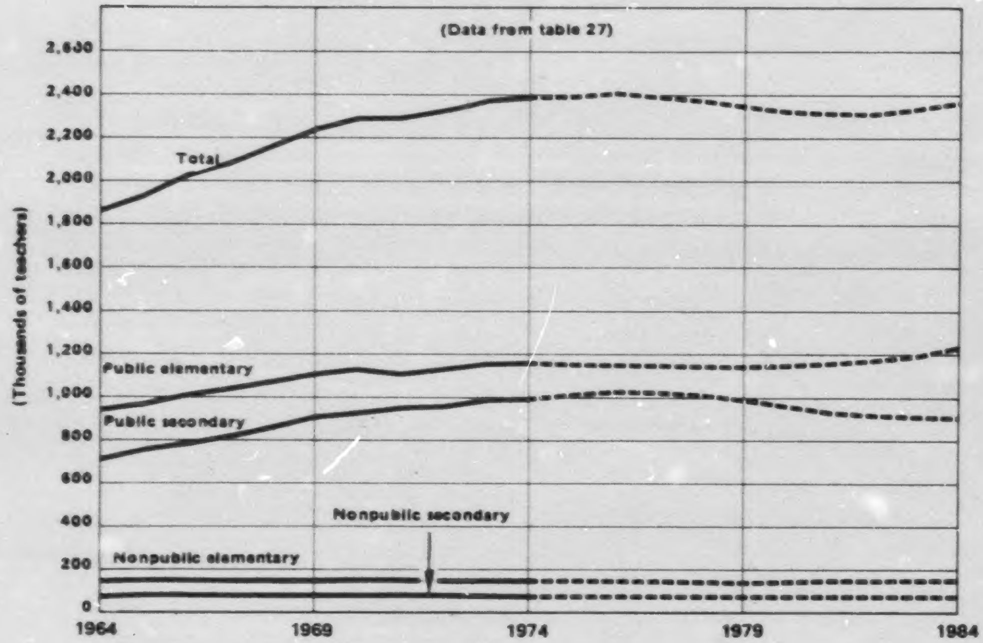

Figure 6. Instructional staff for resident courses in institutions of higher education, by professional rank: United States, fall 1964 to 1984

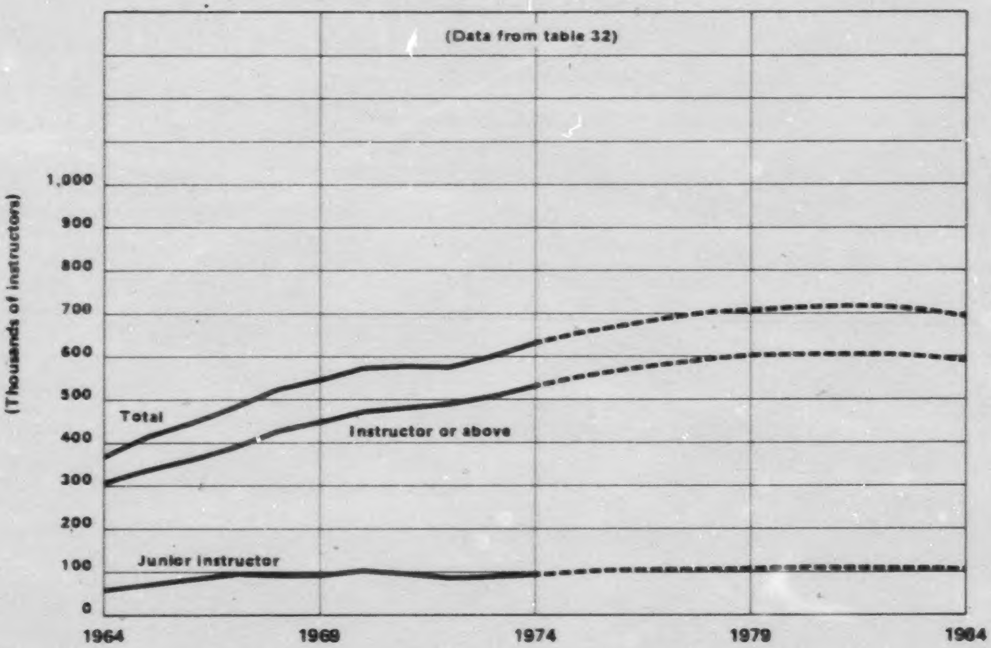

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Figure 7. Total expenditures (1974-75 dollars), by regular elementary and secondary day schools: United States, 1964-65 to 1984-85

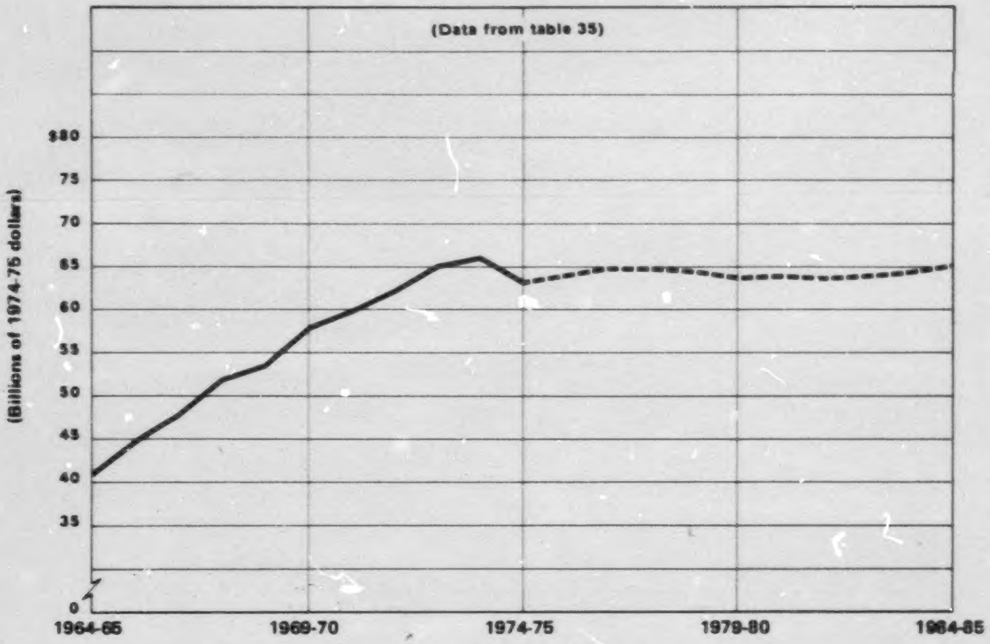

Figure 8. Total expenditures (1974-75 dollars), by institutions of higher education: United States, 1964-65 to 1984-85

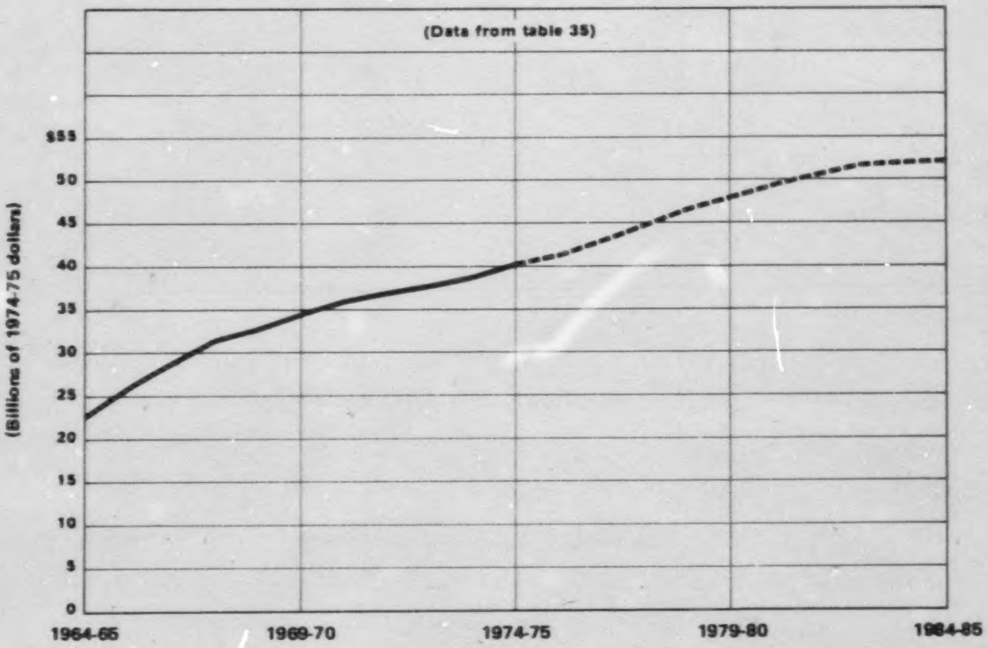

Figure 9. School-and college-age population: United States, October 1964 to 1984

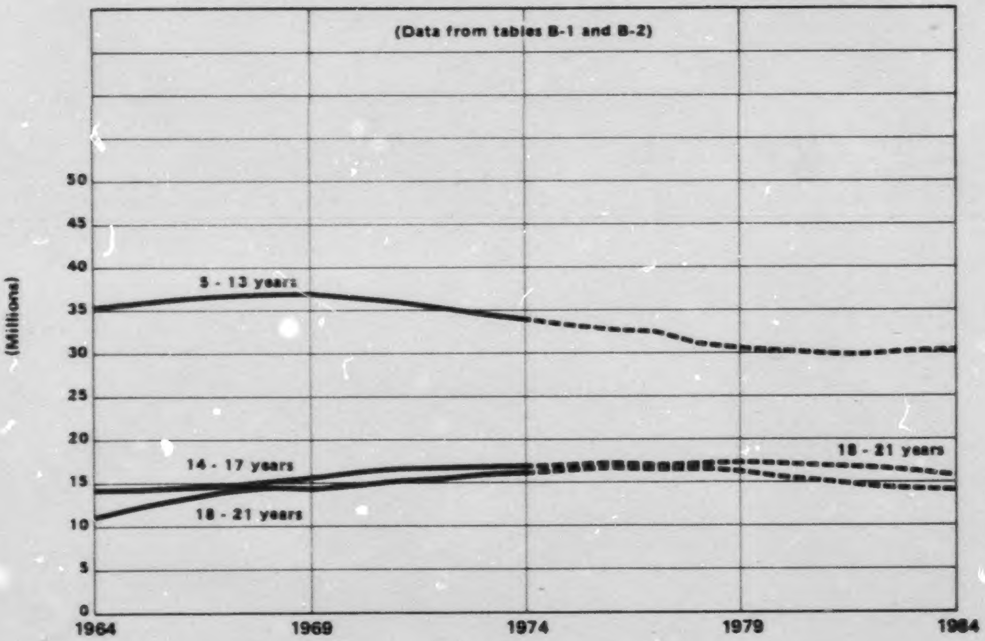
(Data from tables B-1 and B-2)

Table 1.—Summary of Trends in Education: United States, 1964–65 to 1984–85

Characteristic	Fall 1964	Fall 1974	Percent change, 1964 to 1974	Fall 1984[1] (projected)	Percent change, 1974 to 1984
	Thousands			Thousands	
School-age population:					
5–13	35,373	33,903	–4	30,213[2]	–11
14–17	14,229	16,880	19	14,279[2]	–15
18–21	11,542	16,194	40	15,839[2]	–2
18 (nearest birthday)	3,350	4,166	24	3,610[2]	–13
Public school districts	29.4	16.6	–44	....	...
Operating	26.0	16.3	–38	....	...
Nonoperating	3.4	.3	–90	....	...
Enrollment:					
K–grade 12	47,716	49,756	4	44,900	–10
K-8	35,025	34,419	–2	31,500	–8
9–12	12,691	15,337	21	13,300	–13
Public	41,416	45,056	9	40,600	–10
K–8	30,025	30,919	3	28,500	–8
9–12	11,391	14,137	24	12,100	–14
Nonpublic	6,300	4,700	–25	4,200	–11
Higher Education:					
Degree-credit	4,950	9,023	82	9,811	9
Public	3,180	6,838	115	7,780	14
Private	1,771	2,185	23	2,031	–7
4-year	4,239	6,825	61	6,939	2
2-year	711	2,198	209	2,872	31
Undergraduate	4,342	7,833	80	8,475	8
First-time	1,225	1,854	51	1,704	–8
Graduate	608	1,190	96	1,336	12
Men	3,033	4,969	64	5,376	8
Women	1,917	4,056	112	4,435	9
Full-time	3,418	5,817	70	5,845	0
Part-time	1,532	3,206	109	3,966	24
Full-time-equivalent	3,924	7,015	79	7,325	4
Non-degree-credit	330	1,200	264	1,799	50
Public	288	1,150	299	1,723	50
Private	42	50	19	76	52
	1964–65	1974–75		1984–85	
High school graduates	2,665	3,139	18	2,680	–15
Public	2,366	2,839	20	2,380	–16
Nonpublic	298	300	1	300	0
Men	1,314	1,554	18	1,327	–15
Women	1,351	1,585	17	1,353	–15

See footnotes at end of table.

Table 1.–Summary of Trends in Education: United States, 1964–65 to 1984–85–Continued

Characteristic	Fall 1964	Fall 1974	Percent change, 1964 to 1974	Fall 1984[1] (projected)	Percent change, 1974 to 1984
	Percent			Percent	
Percent that high school graduates are of the 18-year-old population	73.9	74.3	...	75.7	...
Percent that first-time degree-credit enrollment is of high school graduates	53.5	60.4	...	62.5	...
	Thousands			Thousands	
Earned degrees:					
Bachelor's	501	944	88	1,076	14
Men	289	522	81	568	9
Women	213	422	98	508	20
First-professional	29	55	90	67	22
Men	28	48	71	52	8
Women	1	7	600	15	114
Master's	117	292	150	340	16
Men	78	161	106	178	11
Women	40	131	228	162	24
Doctor's	16	36	125	43	19
Men	15	29	93	29	0
Women	2	8	300	14	75
	Fall 1964	Fall 1974		Fall 1984	
Instructional staff:					
Elementary and secondary					
Classroom teachers	1,865	2,387	28	2,360	–1
Elementary	1,086	1,311	21	1,379	5
Secondary	779	1,076	38	981	–9
Public	1,648	2,159	31	2,134	–1
Elementary	940	1,161	24	1,229	6
Secondary	708	998	41	905	–9
Nonpublic	217	228	5	226	–1
Other instructional staff (public)	165	257	56	254	–1
Higher education					
Resident courses	367	633	73	695	10
Full-time-equivalent	274	493	80	541	10

Table 1.—Summary of Trends in Education: United States, 1964–65 to 1984–85—Continued

Characteristic	Current unadjusted dollars		Constant 1974–75 dollars
	1964–65	1974–75	1984–85
Total expenditures by regular educational institutions:[3]	Billions of dollars		
All levels	$39.6	$108.4	$122.3
Public	30.8	88.4	99.9
Nonpublic	8.8	20.0	22.4
Elementary and secondary schools	26.7	68.2	70.1
Public	23.6	61.6	63.4
Nonpublic	3.1	6.6	6.7
Institutions of higher education	12.9	40.2	52.2
Public	7.2	26.8	36.5
Nonpublic	5.7	13.4	15.7
	Dollars		
Current expenditure per pupil in average daily attendance in public elementary-secondary schools	$484	$1,255	$1,464
Estimated average charges per full-time undergraduate degree-credit student:			
Tuition and required fees:			
Public	243	503	598
Private	1,088	2,290	2,884
Board:			
Public	436	660	660
Private	488	704	704
Dormitory room:			
Public	271	545	664
Private	331	598	660

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[1] Projections are based on assumptions given in appendix A of *Projections of Educational Statistics to 1984–85*. Users should check the acceptability of these assumptions for their purposes.

[2] Population projections are based on Series 2 from the Bureau of the Census.

[3] Includes current expenditures, interest, and capital outlay.

NOTE.—Data are for the 50 States and the District of Columbia. Because of rounding, details may not add to totals.

CHAPTER II

Enrollment

Martin M. Frankel and Loraine C. Simpson

All Levels (table 2)

Total fall enrollment (elementary, secondary, and higher education) increased from 53 million in 1964 to 60 million in 1974 and is expected to decrease to 56 million in 1984. These totals include daytime enrollment in all regular public and nonpublic (parochial and nonsectarian) elementary and secondary schools; degree-credit enrollment in publicly and privately controlled institutions of higher education in programs leading to a bachelor's or higher degree; and non-degree-credit enrollment in programs that extend not more than 3 years beyond high school and are designed to prepare for a technical, semiprofessional, or craftsman-clerical position.

Excluded from the enrollments in institutions of higher education are adult education courses of regular length; short courses of any kind; and correspondence, television, or radio courses, some of which are degree-credit courses. Excluded from the enrollments in elementary and secondary schools are: (1) Those in public and nonpublic subcollegiate, vocational, technical, and trade schools, unless they are a part of the regular school system; (2) enrollments in evening classes in regular public schools; and (3) enrollments in elementary and secondary grades in public and nonpublic residential schools for exceptional children, Federal schools for Indians, federally operated schools on Federal installations, and subcollegiate departments of public and nonpublic institutions of higher education. The elementary and secondary school enrollments also exclude children aged 3 to 6 years enrolled in independent public and nonpublic nursery schools and kindergartens (exclusively preprimary schools). However, estimates of the latter enrollment are shown in table 2 as a separate item.

The projections of fall enrollments shown in table 2 are based primarily on the following assumptions: (1) The percentages of school-age persons enrolling in school will continue the 1964 to 1974 trends; (2) the retention rates in public elementary and secondary schools will remain constant at the average of the 1970 to 1974 levels; and (3) the series II school-age population on which the projections are based will remain through 1984 substantially as now estimated and projected by the Bureau of the Census. These population bases are shown in appendix B, tables B-1 and B-2.

Elementary and Secondary Day Schools (tables 3, 4)

Fall enrollment in regular elementary and secondary day schools increased from 47.7 million in 1964 to 51.3 million in 1970. In 1974, this enrollment was 49.8 million, 1.5 million fewer students than in 1970, and by 1984 is expected to decrease to 44.8 million, 2.9 million fewer than in 1964. The 1974 figure excludes an estimated 310,000 enrolled in public and nonpublic schools such as residential schools for exceptional children, subcollegiate departments of public and nonpublic institutions of higher education, Federal schools for Indians, and federally operated schools on Federal installations. It also excludes an estimated 1.9 million between the ages of 3 and 6 years enrolled in independent nursery schools and kindergartens and an estimated 1.2 million in "special" (mostly private business and trade) schools.[1]

Enrollment in grades K–8 increased from 35.0 million in 1964 to a high of 36.8 million in 1969 and decreased to 34.4 million in 1974. It is expected to continue to decrease to 30.8 million in 1981 and then begin to increase, reaching 31.5 million by 1984. The projected decrease of 6 million elementary students between 1969 and 1981 is based on the assumption that the series II school-age population on which the projections are based will remain through 1984 substantially as now projected by the Census Bureau.

The series II population projection is based on an ultimate completed cohort fertility rate of 2.1 births per woman, which represents replacement level. Replacement-level fertility is that required for a population to replace itself indefinitely, given projected mortality rates and in the absence of net migration. The 2.1 births per woman is also compatible with the most recent birth expectation data.[2]

Enrollment in grades 9–12, which increased from 12.7 million in 1964 to 15.3 million in 1974, is expected to remain at about the same level through 1978 and then begin to decrease rapidly to 13.3 million in 1984 as the children, born in the low birth years of the late 1960's, progress through high school.

Enrollment in schools organized as secondary (see appendix A, "Glossary," for definition of elementary and secondary schools) increased from 16.5 million in 1964 to 19.9 million in 1974 and is expected to decrease to 17.0 million in 1984. The enrollment in secondary schools is larger than that in grades 9 through 12 (as shown in tables 3 and 4) because it includes all of the grades 9 through 12 enrollment as well as the enrollment in grades 7 and 8 in junior high schools. It may be even higher than it appears to be in table 4, because some State departments of education report only by grade even though some of their schools are organized on an elementary and secondary basis. In recent years, an increasing number of States have reported in this manner, and, therefore, the elementary-secondary breakdown should be used with some reservations.

The reported enrollment in elementary schools is smaller than that in kindergarten through grade 8 (tables 3 and 4) because it excludes enrollment in grades 7 and 8 in junior high schools. Enrollment in elementary schools reached a peak of 32.0 million in 1967 but had dropped to 29.9 million in 1974 and is expected to continue to decrease to 27.0 million in 1980 and 1981 and then begin to increase, reaching 27.7 million by 1984.

Public school enrollment (tables 3, 4)

Projections of enrollment in regular public day schools are shown in table 3 by grade group and in table 4 by organizational level.

The public school enrollment by grade was projected for each grade separately and then summed to obtain the projections by grade group. The projections by grade were derived (1) by applying projected age-specific enrollment rates to 6-year-olds (Bureau of the Census population series II) and (2) by applying projected grade-retention rates to children in grades 1 through 11.

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[1] U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, "Population Characteristics, Social and Economic Characteristics of Students: October 1974," Series P-20, No. 272, November 1974.

[2] U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, "Population Characteristics, Fertility Expectations of American Women: June 1974," Series P-20, No. 277, February 1975.

It should be noted that children entering first grade through fall 1980 were already born when the latest population projections were made; thus, the number is not dependent on assumed fertility rates. By 1984, the last year shown in the tables, only projections of kindergarten through grade 4 depend on assumed fertility rates. For an explanation of the fertility rates used by the Bureau of the Census for projecting series II population, see appendix B, table B-1 footnotes.

The enrollment in regular public day schools by organizational level was derived by assuming that the percentages of the 7th- and 8th-grade enrollment organized as secondary school enrollment will remain constant at the average of the 1972 to 1974 levels.

For a more detailed description of the assumptions and methods used in projecting public school enrollment, see footnotes to tables 3 and 4 and appendix A, table A-1.

Nonpublic school enrollment (tables 3, 4)

About 9.5 percent of regular day school enrollment (K–12) are now in nonpublic schools, mostly (about 75 percent) in Catholic schools. For the past 10 years, the enrollment in Catholic schools has been declining and is expected to continue to decline.

Because of the decreases in Catholic enrollment and because of the limited data available on other nonpublic school enrollment, the projection of nonpublic school enrollment by conventional trend methods is not feasible. The projections by grade group included in table 3 are, therefore, estimates based on the limited information available to the National Center for Education Statistics at this time.

The enrollments in nonpublic schools by organizational level shown in table 4 are the same as those by grade group shown in table 3 because almost all the nonpublic school 7th- and 8th-graders in the past have been in the elementary schools.

Institutions of Higher Education (table 5)

Fall enrollment in both 4-year and 2-year institutions of higher education includes resident and extension, day and evening, full-time and part-time students who (1) are taking work creditable toward a bachelor's or higher degree or (2) are in occupational or general studies programs not chiefly creditable toward a bachelor's degree but preparing for a technical, semiprofessional, or craftsman-clerical position. The total enrollment increased from 5.3 million in 1964 to 10.2 million in 1974 and is expected to be 11.6 million in 1984. In 1984, 15.5 percent of this enrollment is expected to be in occupational or general studies compared with 11.7 percent in 1974 and only 6.2 percent in 1964.

Degree-credit enrollment (tables 6–8, 13)

Opening fall enrollment in courses creditable toward a bachelor's or higher degree increased by 500,000 students from 1973 to 1974. This increase was unexpectedly large, since, from 1970 to 1973, growth had averaged only 200,000 students per year. The 1973 to 1974 increase is similar to 1965 to 1970 increases, which averaged almost 500,000 students per year. However, from 1965 to 1970, full-time enrollment increased over 300,000 students per year. Of the 500,000 increase from 1973 to 1974, full-time enrollment increased by only 130,000.

Although the 1973 to 1974 increase in full-time enrollment does not nearly equal the increases during the 1965 to 1975 interval, the 130,000 full-time student increase from 1973 to 1974 is much larger than annual full-time increases from 1971 to 1973. The 1972 to 1973 increase in full-time students was 37,000 and there was a decrease of 30,000 full-time students from 1971 to 1972.

Degree-credit enrollment increased from 5.0 million in 1964 to 9.0 million in 1974. It is expected to increase to 10.2 million students in 1981, then begin to decrease, reaching 9.8 million in 1984.

Degree-credit enrollment projections are based primarily on the assumption that full-time undergraduate and unclassified enrollment as a percentage of the 18–21-year-old population will remain constant at the 1974 level through 1984 and that the percentage of part-time enrollment will increase, following the 1968 to 1974 trend through 1984.

Non-degree-credit enrollment (tables 9–11)

Opening fall enrollment in non-degree-credit courses (occupational or general studies programs) in all institutions of higher education grew from 330,000 in 1964 to 1,200,000 in 1974, an increase of almost 900,000 students. More than 60 percent of the increase occurred during the 1970–1974 interval, when enrollment jumped from 661,000 to 1,200,000.

It is possible that some of the increases in non-degree-credit enrollment are due to expanded coverage, rather than to actual enrollment increases. It is often difficult for colleges to differentiate between degree-credit and non-degree-credit students. It is possible, also, that some students who were previously considered adult education students are now being counted as non-degree-credit students.

These and other inconsistencies in reporting non-degree-credit students should be considered when using either degree-credit or non-degree-credit enrollment data and projections. Although shifts in degree-credit status are small relative to degree-credit enrollment, they are quite significant when compared with non-degree-credit enrollment, and, consequently, it is possible that the very large increases in non-degree-credit enrollment from 1970 to 1974 are in part attributable to reporting inconsistencies. However, non-degree-credit enrollment is undoubtedly increasing and it is expected to rise to over 1.8 million students in 1984.

Over the next 10 years, almost 550,000 of the expected increase of nearly 600,000 students will be in public 2-year institutions, which accounted for 91 percent of non-degree-credit enrollment in 1974.

The projection of non-degree-credit enrollment is primarily based on the assumption that, for each sex, full-time non-degree-credit enrollment expressed as a percentage of the population 18–21 years of age will follow the 1964 to 1974 trend to 1984.

Full-time-equivalent enrollment (table 12)

Estimated full-time-equivalent opening fall enrollment in degree-credit and non-degree-credit courses increased from 4.1 million in 1964 to 7.8 million in 1974 and is expected to be 8.5 million in 1984. The full-time-equivalent enrollment in degree-credit courses is projected to increase by 700,000 through 1980 and then drop by 400,000 from 1980 to 1984.

The percentage of part-time enrollment in degree-credit courses increased from 29 percent in 1968 to 36 percent in 1974 and is expected to reach 40 percent by 1984. This is a further indication of the changing enrollment patterns in degree-credit courses. Throughout most of the 1960's, the percentage of full-time students remained at about 70 percent. However, recent trends indicate that this percentage is decreasing and is expected to be about 60 percent in 1984.

In non-degree-credit courses, part-time enrollment has always comprised more than 50 percent of total enrollment. This relationship is expected to continue through 1984. The full-time-equivalent enrollment in non-degree-credit courses is expected to increase from 791,000 in 1974 to 1,186,000 in 1984.

The projections of full-time-equivalent enrollment are based on the assumption that the 1974 full-time equivalent of part-time enrollment (37.3 percent for degree-credit students and 36.8 percent for non-degree-credit students) will remain constant through 1984.

First-time degree-credit enrollment (tables 14, 15, 16)

First-time degree-credit enrollment, which increased from 1,225,000 students in 1964 to 1,854,000 in 1974, is expected to increase to 1,938,000 in 1979, then decrease to 1,704,000 in 1984.

The percentage of first-time degree-credit enrollment that is full-time decreased from 83 percent in 1964 to 76 percent in 1974 and is expected to continue decreasing to 72 percent by 1984.

The projection of first-time degree-credit enrollment is based primarily on the assumption that full-time first-time enrollment, expressed as a percentage of the population averaging 18 years of age, will remain constant at the 1974 rate and that the percentage that full-time enrollment is of total first-time enrollment will follow the 1964 to 1974 trend through 1984.

Graduate enrollment (table 17)

The graduate enrollments and projections in this edition differ from graduate figures in 1973 and previous editions because they include extension graduate enrollment, which previously was included in undergraduate and first-professional degree-credit enrollment figures.

Graduate enrollment increased from 608,000 in 1964 to 1.2 million in 1974. During the next 10 years, the number of graduate students is expected to increase by only 140,000 to nearly 1.3 million in 1984.

Undergraduate and first-professional enrollment (tables 18, 19)

Undergraduate and unclassified degree-credit enrollment in 4-year institutions was projected by substracting projected graduate enrollment from projected total opening fall degree-credit enrollment in these institutions.

Estimated undergraduate and first-professional degree-credit enrollment (table 19) in 4-year institutions rose from 3.6 million in 1964 to 5.6 million in 1974. This enrollment is expected to increase to over 6.0 million in 1980, then decrease to 5.6 million by 1984. Undergraduate degree-credit enrollment in 2-year institutions (table 8) more than tripled from 711,000 in 1964 to over 2.2 million in 1974 and is expected to continue increasing, reaching 2.9 million in 1984.

Table 2.—Summary of enrollment in educational institutions, by institutional level and control: United States, fall 1964 to 1984

[In thousands]

Year (fall)	Total enrollment (excluding independent nursery schools and kindergartens)			Institutions of higher education[1]		Regular elementary and secondary day schools[2]				Estimated independent nursery schools and kindergartens[3]	
						Grades K–8		Grades 9–12			
	Total	Public	Nonpublic	Public	Nonpublic	Public	Nonpublic	Public	Nonpublic	Public	Nonpublic
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1964	52,996	44,884	8,112	3,468	1,812	30,025	5,000	11,391	1,300	236	644
1965	54,394	46,143	8,251	3,970	1,951	30,563	4,900	11,610	1,400	305	799
1966	55,629	47,388	8,241	4,349	2,041	31,145	4,800	11,894	1,400	374	858
1967	56,803	48,707	8,096	4,816	2,096	31,641	4,600	12,250	1,400	467	911
1968	58,257	50,375	7,882	5,431	2,082	32,226	4,400	12,718	1,400	437	927
1969	59,124	51,516	7,608	5,897	2,108	32,597	4,200	13,022	1,300	326	1,028
1970	59,890	52,337	7,553	6,428	2,153	32,577	4,100	13,332	1,300	421	1,113
1971	60,229	52,885	7,344	6,804	2,144	32,265	3,900	13,816	1,300	524	1,147
1972	59,859	52,814	7,045	7,070	2,145	31,831	3,700	13,913	1,200	549	1,214
1973	59,833	52,850	6,983	7,420	2,183	31,353	3,800	14,077	1,200	343	1,256
1974	59,979	53,044	6,935	7,988	2,235	30,919	3,500	14,137	1,200	364	1,552
						PROJECTED					
1975	59,919	53,059	6,860	8,359	2,260	30,400	3,400	14,300	1,200	382	1,601
1976	59,864	53,083	6,781	8,683	2,281	30,000	3,300	14,400	1,200	386	1,585
1977	59,366	52,670	6,696	8,970	2,296	29,400	3,200	14,300	1,200	372	1,579
1978	58,718	52,118	6,600	9,218	2,300	28,700	3,100	14,200	1,200	366	1,638
1979	57,902	51,408	6,494	9,408	2,294	28,100	3,000	13,900	1,200	374	1,752
1980	57,347	50,867	6,480	9,567	2,280	27,900	3,000	13,400	1,200	394	1,894
1981	56,826	50,368	6,458	9,668	2,258	27,800	3,000	12,900	1,200	418	2,054
1982	56,457	50,026	6,431	9,726	2,231	27,900	3,000	12,400	1,200	445	2,225
1983	56,322	49,950	6,372	9,650	2,172	28,200	3,000	12,100	1,200	473	2,403
1984	56,410	50,103	6,307	9,503	2,107	28,500	3,000	12,100	1,200	501	2,573

[1] Includes degree-credit and non-degree-credit enrollment.

[2] Does not include independent nursery schools and kindergartens, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, and federally operated schools on Federal installations.

[3] Estimates of independent nursery school and kindergarten enrollments are based on the difference between all nursery school and kindergarten enrollments of children aged 3, 4, 5, and 6 years, as reported by the Bureau of the Census, and nursery school and kindergarten enrollments reported by the regular public and private schools.

[4] For assumptions on which projections of elementary, secondary, and higher education enrollments are based and for projection methods used, see footnotes to tables 3, 6, and 9, and methodology in appendix A, table A-1.

The projections of enrollments in independent nursery schools and kindergartens are based on the following assumptions: (a) Enrollments in all nursery schools and kindergartens of children aged 3, 4, 5, and 6 years will follow the 1964–74 trends of enrollment in these schools at each age level as a percentage of the total population of that age. (b) Enrollments in independent nursery schools and kindergartens of children aged 3, 4, 5, and 6 years will be the difference between enrollment in all nursery schools and kindergartens, as reported by the Bureau of the Census, and enrollment in nursery schools and kindergartens reported by regular public and private schools.

For further methodological details, see appendix A, table A-1.

NOTE.–Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

Final revised figures for fall 1973 opening fall enrollment in institutions of higher education are slightly different from those shown in the table.

SOURCES: Nursery school and kindergarten enrollment data are based on (1) U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (a) *Nursery-Kindergarten Enrollment of Children under Six*, October 1964 through 1966, (b) *Preprimary Enrollment of Children under Six*, October 1967 and 1968, (c) *Preprimary Enrollment*, October 1969 through 1972 and 1974; and (2) U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, "Population Characteristics, Nursery School and Kindergarten Enrollment: October 1973," Series P–20, No. 268, August 1974.

Table 3.—Enrollment in grades K–8 and 9–12 of regular day schools, by institutional control: United States, fall 1964 to 1984[1]

[In thousands]

Year (fall)	Total public and nonpublic			Public			Nonpublic (estimated)[2]		
	K–12	K–8	9–12	K–12	K–8	9–12	K–12	K–8	9–12[3]
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1964	47,716	35,025	12,691	41,416	30,025	11,391	6,300	5,000	[4]1,300
1965	48,473	35,463	13,010	42,173	30,563	11,610	6,300	[4]4,900	[4]1,400
1966	49,239	35,945	13,294	43,039	31,145	11,894	6,200	4,800	1,400
1967	49,891	36,241	13,650	43,891	31,641	12,250	6,000	4,600	1,400
1968	50,744	36,626	14,118	44,944	32,226	12,718	5,800	[4]4,400	[4]1,400
1969	51,119	36,797	14,322	45,619	32,597	13,022	5,500	4,200	1,300
1970	51,309	36,677	14,632	45,909	32,577	13,332	5,400	[5]4,100	[5]1,300
1971	51,281	36,165	15,116	46,081	32,265	13,816	5,200	[6]3,900	[6]1,300
1972	50,644	35,531	15,113	45,744	31,831	13,913	4,900	[6]3,700	[6]1,200
1973	50,229	34,953	15,277	45,429	31,353	14,077	4,800	[6]3,600	[6]1,200
1974	49,756	34,419	15,337	45,056	30,919	14,137	4,700	[6]3,500	[6]1,200
					PROJECTED[7]				
1975	49,300	33,800	15,500	44,700	30,400	14,300	4,600	3,400	1,200
1976	48,900	33,300	15,600	44,400	30,000	14,400	4,500	3,300	1,200
1977	48,100	32,600	15,500	43,700	29,400	14,300	4,400	3,200	1,200
1978	47,200	31,800	15,400	42,900	28,700	14,200	4,300	3,100	1,200
1979	46,200	31,100	15,100	42,000	28,100	13,900	4,200	3,000	1,200
1980	45,500	30,900	14,600	41,300	27,900	13,400	4,200	3,000	1,200
1981	44,900	30,800	14,100	40,700	27,800	12,900	4,200	3,000	1,200
1982	44,500	30,900	13,600	40,300	27,900	12,400	4,200	3,000	1,200
1983	44,500	31,200	13,300	40,300	28,200	12,100	4,200	3,000	1,200
1984	44,800	31,500	13,300	40,600	28,500	12,100	4,200	3,000	1,200

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[1] Does not include independent nursery schools and kindergartens, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, federally operated schools on Federal installations, and other schools not in the regular school system.

[2] Estimated unless otherwise noted. Estimates for 1964 revised in spring 1968 on basis of 1965 Office of Education survey.

[3] Includes some pupils enrolled in grades 7 and 8 of nonpublic secondary schools from 1965 through 1968.

[4] Reported data from Office of Education surveys.

[5] Estimates are based on reported data from the Office of Education and the National Catholic Educational Association.

[6] Estimates based on reports from the National Catholic Educational Association.

[7] The projection of fall enrollment in regular day schools is based on the following assumptions: (a) Enrollment in regular public nursery schools and kindergartens will remain constant with respect to total public nursery schools and kindergartens at the 1974 level. (b) The enrollment rate of the 6-year-old population in grade 1 will remain constant at the 1974 level. (c) The public school enrollment in grade 7 in a given year t will exceed the public school enrollment in grade 6 in year t–1 by 3.6 percent of the projected enrollment in grades K–8 in Catholic elementary schools in year t–1. (d) The public school enrollment in grade 9 in year t will exceed the public school enrollment in grade 8 in year t–1 by 5.2 percent of the projected enrollment in grades K–8 in Catholic elementary schools in year t–1. (e) The retention rates of all other public school grades will remain constant at the average of the rates for the past 5 years. (f) Enrollments in grades K–8 in Catholic elementary schools will decrease 100,000 students per year from 2.6 million in 1974 to 2.0 million in 1980 and then remain constant. (g) Enrollments in grades K–8 in all regular nonpublic day schools will decrease by 100,000 students per year from 3.5 million in 1974 to 3.0 million in 1979 and then remain constant; grades 9–12 in these schools will remain constant at the 1974 estimated level.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

SOURCES: Enrollment data and estimates are based on (1) U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (a) *Statistics of Public Schools*, fall 1964 through 1974, (b) *Statistics of Nonpublic Elementary and Secondary Schools, 1970–71*, (c) *Statistics of Public and Nonpublic Elementary and Secondary Day*

Schools, 1968–69, (d) *Statistics of Nonpublic Elementary and Secondary Schools, 1965–66*, (e) *Nonpublic School Enrollment in Grades 9–12, Fall 1964, and Graduates, 1963–64*; and (2) National Catholic Educational Association publications: (a) *A Report on U.S. Catholic Schools, 1970–71*, and (b) *U.S. Catholic Schools, 1971–72 through 1974–75.*

The population projections, as of October 1, of 6-year-olds on which the enrollment projections in grade 1 are based, are consistent with Series II population projections in U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P–25, No. 541, February 1975. The I, II, and III population projections, together with definitions of each series, are shown in appendix B, table B-1.

Table 4.—Enrollment in regular day schools, by institutional control and organizational level: United States, fall 1964 to 1984[1]

[In thousands]

Year (fall)	Total public and nonpublic			Public			Nonpublic (estimated)[2]		
	K–12	Elementary	Secondary	K–12	Elementary	Secondary	K–12	Elementary	Secondary
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1964	47,716	31,221	16,495	41,416	26,221	15,195	6,300	5,000	[3]1,300
1965	48,473	31,570	16,904	42,173	26,670	15,504	6,300	[3]4,900	[3]1,400
1966	49,239	31,905	17,334	43,039	27,105	15,934	6,200	4,800	1,400
1967	49,891	31,972	17,919	43,891	27,372	16,519	6,000	4,600	1,400
1968	50,744	31,763	18,981	44,944	27,363	17,581	5,800	[3]4,400	[3]1,400
1969	51,119	31,655	19,463	45,619	27,455	18,163	5,500	4,200	1,300
1970	51,309	31,601	19,708	45,909	27,501	18,406	5,400	[4]4,100	[4]1,300
1971	51,281	31,588	19,693	46,081	27,688	18,393	5,200	[5]3,900	[5]1,300
1972	50,644	31,023	19,621	45,744	27,323	18,421	4,900	[5]3,700	[5]1,200
1973	50,229	30,035	20,195	45,429	26,435	18,995	4,800	[5]3,600	[5]1,200
1974	49,756	29,886	19,870	45,056	26,386	18,670	4,700	3,500	1,200
				PROJECTED[6]					
1975	49,300	29,200	20,100	44,700	25,800	18,900	4,600	3,400	1,200
1976	48,900	28,800	20,100	44,400	25,500	18,900	4,500	3,300	1,200
1977	48,100	28,200	19,900	43,700	25,000	18,700	4,400	3,200	1,200
1978	47,200	27,700	19,500	42,900	24,600	18,300	4,300	3,100	1,200
1979	46,200	27,200	19,000	42,000	24,200	17,800	4,200	3,000	1,200
1980	45,500	27,000	18,400	41,300	24,000	17,200	4,200	3,000	1,200
1981	44,900	27,000	17,900	40,700	24,000	16,700	4,200	3,000	1,200
1982	44,500	27,100	17,400	40,300	24,100	16,200	4,200	3,000	1,200
1983	44,500	27,300	17,200	40,300	24,300	16,000	4,200	3,000	1,200
1984	44,800	27,700	17,000	40,600	24,700	15,800	4,200	3,000	1,200

[1] Does not include independent nursery schools and kindergartens, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, federally operated schools on Federal installations, and other schools not in the regular school system.

[2] Estimated unless otherwise noted. Estimates for 1964 revised in spring 1968 on basis of 1965 Office of Education survey.

[3] Reported data from Office of Education surveys.

[4] Estimates based on reported data from the Office of Education and the National Catholic Educational Association.

[5] Estimates based on reports from the National Catholic Educational Association.

[6] The projection of fall enrollment in regular public day schools by organizational level is based on the assumption that the percentage of enrollment in grades 7 and 8 that will be organized as secondary enrollment will remain constant at the 1974 level.

The projection of regular fall enrollment in nonpublic schools by organizational level is based on the assumption that substantially all nonpublic enrollment in grades 7 and 8 will continue as elementary enrollment.

For further methodological details, see appendix A, table A-1.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

SOURCES: Enrollment data and estimates are based on (1) U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (a) *Statistics of Public Schools,* fall 1964 through 1974, (b) *Statistics of Nonpublic Elementary and Secondary* [illegible]*ols, 1970–71*, (c) *Statistics of Public and N*[illegible]*public Elementary and Secondary Day Schools,* 1968–69, (d) *Statistics of Nonpublic Elementary and Secondary Schools,* 1965–66, (e) *Nonpublic School Enrollment in Grades 9–12, Fall 1964, and Graduates, 1963–64*; and (2) National Catholic Educational Association publications: (a) *A Report on U.S. Catholic Schools, 1970–71*, and (b) *U.S. Catholic Schools, 1971–72, through 1974–75.*

Table 5.—Summary of enrollment in all institutions of higher education, by degree-credit status and institutional type: United States, fall 1964 to 1984

[Resident and extension opening fall enrollment—in thousands]

Year (fall)	Total degree-credit and non-degree-credit enrollment	Degree-credit			Non-degree-credit		
		Total	4-year	2-year	Total	4-year	2-year
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1964	5,280	4,950	4,239	711	330	52	278
1965	5,921	5,526	4,685	841	395	63	332
1966[1]	6,390	5,928	4,984	945	462	80	381
1967[1]	6,912	6,406	5,325	1,081	505	73	432
1968	7,513	6,928	5,639	1,289	585	82	503
1969	8,005	7,484	5,956	1,528	521	72	448
1970	8,581	7,920	6,290	1,630	661	68	593
1971	8,949	8,116	6,391	1,725	833	72	761
1972	9,215	8,265	6,473	1,792	950	76	874
1973	9,602	8,520	6,598	1,921	1,082	83	1,000
1974	10,224	9,023	6,825	2,198	1,200	87	1,113
	PROJECTED[2]						
1975	10,619	9,328	6,993	2,335	1,291	90	1,201
1976	10,964	9,585	7,128	2,457	1,379	97	1,282
1977	11,266	9,805	7,244	2,561	1,461	103	1,358
1978	11,518	9,978	7,314	2,664	1,540	109	1,431
1979	11,702	10,091	7,344	2,747	1,611	113	1,498
1980	11,847	10,173	7,354	2,819	1,674	118	1,556
1981	11,926	10,203	7,329	2,874	1,723	121	1,602
1982	11,957	10,188	7,282	2,906	1,769	124	1,645
1983	11,822	10,030	7,128	2,902	1,792	126	1,666
1984	11,610	9,811	6,939	2,872	1,799	127	1,672

[1] The breakdown between degree-credit and non-degree-credit enrollment in 1966 and 1967 is estimated. See appendix A, "Estimation Methods," secs. 3d—3g.

[2] For assumptions underlying these projections and for methods of projecting, see footnotes to tables 6 and 9, and table A-1 in appendix A.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

Final revised figures for fall 1973 opening fall enrollment in institutions of higher education are slightly different from those shown in the table.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Opening (Fall) Enrollment in Higher Education*, annually, 1964 through 1968, 1971 through 1974, (2) *Fall Enrollment in Higher Education, Supplementary Information*, 1969 and 1970, and (3) data from *Resident and Extension Enrollment in Institutions of Higher Education*, fall 1966 (unpublished).

Table 6.—Total degree-credit enrollment in all institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1964 to 1984

[Resident and extension opening fall enrollment]

Year (fall) (1)	Total degree-credit enrollment (2)	Sex		Attendance status		Control	
		Men (3)	Women (4)	Full-time (5)	Part-time (6)	Public (7)	Private (8)
1964	4,950,173	3,032,992	1,917,181	3,417,796	1,532,377	3,179,527	1,770,646
1965	5,526,325	3,374,603	2,151,722	3,909,987	1,616,338	3,624,442	1,901,883
1966[1]	5,928,000	3,577,000	2,351,000	4,225,000	1,703,000	3,940,000	1,988,000
1967[1]	6,406,000	3,822,000	2,584,000	4,556,000	1,850,000	4,360,000	2,046,000
1968	6,928,115	4,119,002	2,809,113	4,937,193	1,990,922	4,891,743	2,036,372
1969	7,484,073	4,419,147	3,064,926	5,253,756	2,230,318	5,414,934	2,069,139
1970	7,920,149	4,636,641	3,283,508	5,489,033	2,431,116	5,800,089	2,120,060
1971	8,116,103	4,717,098	3,399,005	5,676,486	2,439,617	6,013,934	2,102,169
1972	8,265,057	4,700,622	3,564,435	5,646,749	2,618,308	6,158,929	2,106,128
1973	8,519,750	4,772,288	3,747,462	5,684,049	2,835,701	6,388,619	2,131,131
1974	9,023,446	4,968,706	4,054,740	5,817,396	3,206,050	6,838,324	2,185,122
	PROJECTED[2]						
1975	9,328,000	5,132,000	4,196,000	5,956,000	3,372,000	7,121,000	2,207,000
1976	9,585,000	5,269,000	4,316,000	6,064,000	3,521,000	7,361,000	2,224,000
1977	9,805,000	5,381,000	4,424,000	6,146,000	3,659,000	7,570,000	2,235,000
1978	9,978,000	5,471,000	4,507,000	6,204,000	3,774,000	7,742,000	2,236,000
1979	10,091,000	5,529,000	4,562,000	6,226,000	3,865,000	7,864,000	2,227,000
1980	10,173,000	5,572,000	4,601,000	6,225,000	3,948,000	7,963,000	2,210,000
1981	10,203,000	5,591,000	4,612,000	6,198,000	4,005,000	8,017,000	2,186,000
1982	10,188,000	5,581,000	4,607,000	6,145,000	4,043,000	8,030,000	2,158,000
1983	10,030,000	5,490,000	4,540,000	6,011,000	4,019,000	7,932,000	2,098,000
1984	9,811,000	5,376,000	4,435,000	5,845,000	3,966,000	7,780,000	2,031,000

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[1] The breakdown between degree-credit and nondegree-credit enrollment in 1966 and 1967 is estimated. See appendix A, "Estimation Methods," secs. 3d and 3f.

These estimates differ from the estimates published in the 1968 edition of *Projections of Educational Statistics*, because of data available from the 1967 comprehensive report of enrollment and revisions in the 1966 comprehensive data for 4-year institutions.

[2] The projection of total degree-credit enrollment in all institutions of higher education, for each sex, is based primarily on the following assumptions and methodology: (a) The 1974 percentage that full-time undergraduate and unclassified enrollment was of the population aged 18–21 years will remain constant through 1984. (b) The percentage that full-time undergraduate and unclassified enrollment is of total undergraduate and unclassified enrollment will follow the 1968 to 1974 trend through 1984. (c) The percentage of undergraduate and unclassified enrollment in public 2-year institutions will equal 100 percent less the percentage of undergraduate and unclassified enrollment in the three other type and control categories of institutions; the percentage of undergraduate and unclassified enrollment in the three other categories will each follow their 1968 to 1974 trend through 1984. (d) For each type and control category of institutions, the percentage that full-time undergraduate and unclassified enrollment is of total undergraduate and unclassified enrollment will follow the 1968 to 1974 trend through 1984. (e) The number of full-time first-professional enrollments will follow the 1968 to 1974 trend through 1984. (f) The 1974 percentage that full-time first-professional enrollment was of total first-professional enrollment will remain constant through 1984. (g) The 1974 percentage of first-professional enrollment in public institutions will remain constant through 1984. (h) For both public and private 4-year institutions, the 1974 percentage that full-time first-professional enrollment was of total first-professional enrollment will remain constant through 1984. (i) The percentage that full-time graduate enrollment is of full-time undergraduate and unclassified enrollment will follow the 1968 to 1974 trend through 1984. (j) The 1974 percentage that full-time graduate enrollment was of total graduate enrollment will remain constant through 1984. (k) The 1974 percentage of graduate enrollment in public institutions will remain constant through 1984. (l) For both public and private 4-year institutions, the 1974 percentage that full-time graduate enrollment

was of total graduate enrollment will remain constant through 1984.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

Final revised figures for fall 1973 opening fall enrollment in institutions of higher education are slightly different from those shown in the table.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Opening (Fall) Enrollment in Higher Education*, annually, 1964 through 1968, 1971 through 1974, (2) *Fall Enrollment in Higher Education, Supplementary Information*, 1969 and 1970, and (3) unpublished data from *Resident and Extension Enrollment in Institutions of Higher Education*, fall 1966 and 1967.

Population on which projections are based is shown in appendix B, table B-2.

Table 7.—Total degree-credit enrollment in 4-year institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1964 to 1984

[Resident and extension opening fall enrollment]

Year (fall)	Total degree-credit enrollment	Sex		Attendance Status		Control	
		Men	Women	Full-time	Part-time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1964	4,239,305	2,593,483	1,645,822	3,021,411	1,217,894	2,558,668	1,680,637
1965	4,684,888	2,852,757	1,832,131	3,414,535	1,270,353	2,886,552	1,798,336
1966[1]	4,984,000	3,000,000	1,984,000	3,662,000	1,322,000	3,100,000	1,883,000
1967[1]	5,325,000	3,170,000	2,155,000	3,940,000	1,385,000	3,393,000	1,933,000
1968	5,638,616	3,336,709	2,301,907	4,198,486	1,440,130	3,722,602	1,916,014
1969	5,955,644	3,508,516	2,447,128	4,404,620	1,551,024	4,002,324	1,953,320
1970	6,290,167	3,682,680	2,607,487	4,613,188	1,676,979	4,280,327	2,009,840
1971	6,390,782	3,713,926	2,676,856	4,746,400	1,644,382	4,391,228	1,999,554
1972	6,473,203	3,701,384	2,771,819	4,742,829	1,730,374	4,464,464	2,008,739
1973	6,598,259	3,723,999	2,874,260	4,760,432	1,837,827	4,559,643	2,038,616
1974	6,825,152	3,793,909	3,031,243	4,857,208	1,967,944	4,734,198	2,090,954
				PROJECTED[2]			
1975	6,993,000	3,888,000	3,105,000	4,961,000	2,032,000	4,876,000	2,117,000
1976	7,128,000	3,966,000	3,162,000	5,040,000	2,088,000	4,989,000	2,139,000
1977	7,244,000	4,030,000	3,214,000	5,102,000	2,142,000	5,091,000	2,153,000
1978	7,314,000	4,071,000	3,243,000	5,138,000	2,176,000	5,161,000	2,153,000
1979	7,344,000	4,091,000	3,253,000	5,146,000	2,198,000	5,202,000	2,142,000
1980	7,354,000	4,102,000	3,252,000	5,134,000	2,220,000	5,229,000	2,125,000
1981	7,329,000	4,094,000	3,235,000	5,104,000	2,225,000	5,228,000	2,101,000
1982	7,282,000	4,071,000	3,211,000	5,054,000	2,228,000	5,209,000	2,073,000
1983	7,128,000	3,988,000	3,140,000	4,935,000	2,193,000	5,113,000	2,015,000
1984	6,939,000	3,891,000	3,048,000	4,794,000	2,145,000	4,989,000	1,960,000

[1] The breakdown between degree-credit and non-degree-credit enrollment in 1966 and 1967 is estimated. See appendix A, "Estimation Methods," secs. 3d and 3f.

These estimates differ from the estimates published in the 1968 edition of *Projections of Educational Statistics*, because of data available from the 1967 comprehensive report of enrollment and revisions in the 1966 comprehensive data for 4-year institutions.

[2] For assumptions underlying these projections, see footnotes to table 6. For further methodological details, see appendix A, table A-1.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

Final revised figures for fall 1973 opening fall enrollment in institutions of higher education are slightly different from those shown in the table.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Opening (Fall) Enrollment in Higher Education*, annually, 1964 through 1968, 1971 through 1974, (2) *Fall Enrollment in Higher Education, Supplementary Information*, 1969 and 1970, and (3) unpublished data from *Resident and Extension Enrollment in Institutions of Higher Education*, fall 1966 and 1967.

Population on which projections are based is shown in appendix B, table B-2.

Table 8.—Total degree-credit enrollment in 2-year institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1964 to 1984

[Resident and extension opening fall enrollment]

Year (fall)	Total degree-credit enrollment	Sex		Attendance status		Control	
		Men	Women	Full-time	Part-time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1964	710,868	439,509	271,359	396,385	314,483	620,859	90,009
1965	841,437	521,846	319,591	495,452	345,965	737,890	103,547
1966[1]	945,000	577,000	367,000	563,000	381,000	840,000	105,000
1967[1]	1,081,000	652,000	429,000	616,000	465,000	968,000	113,000
1968	1,289,499	782,293	507,206	738,707	550,792	1,169,141	120,358
1969	1,528,429	910,631	617,798	849,135	679,294	1,412,610	115,819
1970	1,629,982	953,961	676,021	875,845	754,137	1,519,762	110,220
1971	1,725,321	1,003,172	722,149	930,086	796,235	1,622,706	102,615
1972	1,791,854	999,238	792,616	903,920	887,934	1,694,465	97,389
1973	1,921,491	1,048,289	873,202	923,617	997,874	1,828,976	92,515
1974	2,198,294	1,174,797	1,023,497	960,188	1,238,106	2,104,126	94,168
				PROJECTED[2]			
1975	2,335,000	1,244,000	1,091,000	995,000	1,340,000	2,245,000	90,000
1976	2,457,000	1,303,000	1,154,000	1,024,000	1,433,000	2,372,000	85,000
1977	2,561,000	1,351,000	1,210,000	1,044,000	1,517,000	2,479,000	82,000
1978	2,664,000	1,400,000	1,264,000	1,066,000	1,598,000	2,581,000	83,000
1979	2,747,000	1,438,000	1,309,000	1,080,000	1,667,000	2,662,000	85,000
1980	2,819,000	1,470,000	1,349,000	1,091,000	1,728,000	2,734,000	85,000
1981	2,874,000	1,497,000	1,377,000	1,094,000	1,780,000	2,789,000	85,000
1982	2,906,000	1,510,000	1,396,000	1,091,000	1,815,000	2,821,000	85,000
1983	2,902,000	1,502,000	1,400,000	1,076,000	1,826,000	2,819,000	83,000
1984	2,872,000	1,485,000	1,387,000	1,051,000	1,821,000	2,791,000	81,000

[1] The breakdown between degree-credit and non-degree-credit enrollment in 1966 and 1967 is estimated. See appendix A, "Estimation Methods," sec. 3d and 3f.

These estimates differ from the estimates published in the 1968 edition of *Projections of Educational Statistics*, because of data available from the 1967 comprehensive report of enrollment and revisions in the 1966 comprehensive data for 4-year institutions.

[2] For assumptions underlying these projections, see footnotes in table 6. For further methodological details, see appendix A, table A-1.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

Final revised figures for fall 1973 opening fall enrollment in institutions of higher education are slightly different from those shown in the table.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Opening (Fall) Enrollment in Higher Education*, annually 1964 through 1968, 1971 through 1974, (2) *Fall Enrollment in Higher Education, Supplementary Information*, 1969 and 1970, and (3) unpublished data from *Resident and Extension Enrollment in Institutions of Higher Education*, fall 1966 and 1967.

Population on which projections are based is shown in appendix B, table B-2.

Table 9.—Non-degree-credit enrollment in all institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1964 to 1984

[Resident and extension opening fall enrollment]

Year (fall)	Total non-degree-credit enrollment	Sex		Attendance status[1]		Control	
		Men	Women	Full-time	Part-time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1964	329,847	215,721	114,126	140,000	190,000	288,181	41,666
1965	394,539	255,417	139,122	172,000	222,000	345,154	49,385
1966[2]	462,000	279,000	183,000	213,000	249,000	409,000	53,000
1967[2]	505,000	311,000	194,000	236,000	269,000	456,000	49,000
1968	584,976	358,647	226,329	272,962	312,014	538,909	46,067
1969	520,587	327,054	193,533	245,128	275,459	481,934	38,653
1970	660,738	407,001	253,737	326,257	334,481	628,045	32,693
1971	832,541	489,906	342,635	400,746	431,795	790,375	42,166
1972	949,803	538,135	411,668	425,640	524,163	911,706	38,097
1973	1,082,373	598,764	483,609	505,444	576,929	1,030,897	51,476
1974	1,200,283	653,723	546,560	552,877	647,406	1,150,176	50,107
	PROJECTED[3]						
1975	1,291,000	703,000	588,000	594,000	697,000	1,238,000	53,000
1976	1,379,000	748,000	631,000	635,000	744,000	1,322,000	57,000
1977	1,461,000	790,000	671,000	672,000	789,000	1,400,000	61,000
1978	1,540,000	830,000	710,000	708,000	832,000	1,476,000	64,000
1979	1,611,000	866,000	745,000	741,000	870,000	1,544,000	67,000
1980	1,674,000	898,000	776,000	771,000	903,000	1,604,000	70,000
1981	1,723,000	919,000	804,000	793,000	930,000	1,651,000	72,000
1982	1,769,000	942,000	827,000	814,000	955,000	1,696,000	73,000
1983	1,792,000	952,000	840,000	824,000	968,000	1,718,000	74,000
1984	1,799,000	955,000	844,000	828,000	971,000	1,723,000	76,000

[1] Estimated for all years prior to 1968. See appendix A, "Estimation Methods," sec. 3k.

[2] The breakdown between degree-credit and non-degree-credit enrollment in 1966 and 1967 is estimated. See appendix A, "Estimation Methods," secs. 3e and 3g.

These estimates differ from estimates published in the 1968 edition of *Projections of Educational Statistics*, because of data available from the 1967 comprehensive report of enrollment and revisions in the 1966 comprehensive data for 4-year institutions.

[3] The projection of total non-degree-credit enrollment in all institutions by sex is based primarily on the assumption that enrollment, expressed as a percentage of population aged 18–21 years, will follow the 1964–1974 trend to 1984.

For each sex, it was assumed that the percentage distribution of total non-degree-credit enrollment, by type and control of institution, would remain constant at the 1974 percentages through 1984.

The projection of total non-degree-credit enrollment by attendance status is based on the assumption that, for each sex, full-time non-degree-credit enrollment expressed as a percentage of total full-time non-degree-credit enrollment, will remain constant at the 1974 percentage through 1984.

For further methodological details, see appendix A, table A-1.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

Final revised figures for fall 1973 opening fall enrollment in institutions of higher education are slightly different from those shown in the table.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Opening (Fall) Enrollment in Higher Education*, annually, 1964 through 1968, 1971 through 1974, (2) *Fall Enrollment in Higher Education, Supplementary Information*, 1969 and 1970, and (3) unpublished data from *Resident and Extension Enrollment in Institutions of Higher Education*, fall 1966 and 1967.

Population on which projections are based is shown in appendix B, table B-2.

Table 10.—Non-degree-credit enrollment in 4-year institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1964 to 1984

[Resident and extension opening fall enrollment]

Year (fall) (1)	Total non-degree-credit enrollment (2)	Sex		Attendance status[1]		Control	
		Men (3)	Women (4)	Full-time (5)	Part-time (6)	Public (7)	Private (8)
1964	51,789	36,582	15,207	20,000	32,000	34,261	17,528
1965	63,024	43,624	19,400	25,000	38,000	41,780	21,244
1966[2]	80,000	47,000	33,000	39,000	41,000	59,000	21,000
1967[2]	73,000	48,000	26,000	32,000	41,000	51,000	22,000
1968	82,179	50,589	31,590	36,166	46,013	61,576	20,603
1969	72,358	46,974	25,384	37,171	35,187	47,820	24,538
1970	67,512	43,708	23,804	36,753	30,759	45,835	21,677
1971	71,951	43,920	28,031	40,284	31,667	47,214	24,737
1972	75,870	43,383	32,487	42,272	33,598	53,607	22,263
1973	82,575	45,292	37,283	50,317	32,258	57,164	25,411
1974	87,030	46,078	40,952	56,879	30,151	59,499	27,531
				PROJECTED[3]			
1975	90,000	48,000	42,000	61,000	29,000	61,000	29,000
1976	97,000	51,000	46,000	65,000	32,000	66,000	31,000
1977	103,000	54,000	49,000	69,000	34,000	70,000	33,000
1978	109,000	57,000	52,000	73,000	36,000	74,000	35,000
1979	113,000	60,000	53,000	77,000	36,000	77,000	36,000
1980	118,000	62,000	56,000	79,000	39,000	80,000	38,000
1981	121,000	63,000	58,000	82,000	39,000	82,000	39,000
1982	124,000	65,000	59,000	84,000	40,000	84,000	40,000
1983	126,000	66,000	60,000	85,000	41,000	86,000	40,000
1984	127,000	66,000	61,000	86,000	41,000	86,000	41,000

[1] Estimated for all years prior to 1968. See appendix A, "Estimation Methods," sec. 3k.

[2] The breakdown between degree-credit and non-degree-credit enrollment in 1966 and 1967 is estimated. See appendix A, "Estimation Methods," secs. 3e and 3g.

[3] For assumptions underlying these projections, see footnotes to table 9. For methodological details, see appendix A, table A-1.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

Final revised figures for fall 1973 opening fall enrollment in institutions of higher education are slightly different from those shown in the table.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Opening (Fall) Enrollment in Higher Education*, annually, 1964 through 1968, 1971 through 1974, (2) *Fall Enrollment in Higher Education, Supplementary Information*, 1969 and 1970, and (3) unpublished data from *Resident and Extension Enrollment in Institutions of Higher Education*, fall 1966 and 1967.

Population on which projections are based is shown in appendix B, table B-2.

Table 11.—Non-degree-credit enrollment in 2-year institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1964 to 1984

[Resident and extension opening fall enrollment]

Year (fall)	Total non-degree-credit enrollment	Sex		Attendance status[1]		Control	
		Men	Women	Full-time	Part-time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1964	278,058	179,139	98,919	120,000	158,000	253,920	24,138
1965	331,515	211,793	119,722	147,000	184,000	303,374	28,141
1966[2]	381,000	232,000	150,000	174,000	208,000	350,000	32,000
1967[2]	432,000	263,000	168,000	204,000	228,000	404,000	27,000
1968	502,797	308,058	194,739	236,796	266,001	477,333	25,464
1969	448,229	280,080	168,149	207,957	240,272	434,114	14,115
1970	593,226	363,293	229,933	289,504	303,722	582,210	11,016
1971	760,590	445,986	314,604	360,462	400,128	743,161	17,429
1972	873,933	494,752	379,181	383,368	490,565	858,099	15,834
1973	999,798	553,472	446,326	455,127	544,671	973,733	26,065
1974	1,113,253	607,645	505,608	495,998	617,256	1,090,677	22,576
				PROJECTED[3]			
1975	1,201,000	655,000	546,000	533,000	668,000	1,177,000	24,000
1976	1,282,000	697,000	585,000	570,000	712,000	1,256,000	26,000
1977	1,358,000	736,000	622,000	603,000	755,000	1,330,000	28,000
1978	1,431,000	773,000	658,000	635,000	796,000	1,402,000	29,000
1979	1,498,000	806,000	692,000	664,000	834,000	1,467,000	31,000
1980	1,556,000	836,000	720,000	692,000	864,000	1,524,000	32,000
1981	1,602,000	856,000	746,000	711,000	891,000	1,569,000	33,000
1982	1,645,000	877,000	768,000	730,000	915,000	1,612,000	33,000
1983	1,666,000	886,000	780,000	739,000	927,000	1,632,000	34,000
1984	1,672,000	889,000	783,000	742,000	930,000	1,637,000	35,000

[1] Estimated for all years prior to 1968. See appendix A, "Estimation Methods," sec. 3k.

[2] The breakdown between degree-credit and non-degree-credit enrollment in 1966 and 1967 is estimated. See appendix A, "Estimation Methods," secs. 3e and 3g.

[3] For assumptions underlying these projections, see footnotes to table 9. For methodological details, see appendix A, table A-1.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

Final revised figures for fall 1973 opening fall enrollment in institutions of higher education are slightly different from those shown in the table.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Opening (Fall) Enrollment in Higher Education*, annually, 1964 through 1968, 1971 through 1974, (2) *Fall Enrollment in Higher Education, Supplementary Information*, 1969 and 1970, and (3) unpublished data from *Resident and Extension Enrollment in Institutions of Higher Education*, fall 1966 and 1967.

Population on which projections are based is shown in appendix B, table B-2.

Table 12.—Estimated full-time-equivalent enrollment in all institutions of higher education, by degree-credit status and institutional control: United States, fall 1964 to 1984

[In thousands]

Year (fall)	All students			Students taking work creditable toward a bachelor's or higher degree			Students in occupational or general studies programs not chiefly creditable toward a bachelor's degree		
	Total	Public	Private	Total	Public	Private	Total	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1964[1]	4,115	2,671	1,444	3,924	2,504	1,421	191	167	24
1965[1]	4,671	3,094	1,577	4,443	2,895	1,548	228	199	29
1966[1]	5,070	3,398	1,672	4,792	3,154	1,637	278	243	35
1967[1]	5,480	3,761	1,719	5,168	3,482	1,686	312	279	33
1968[1]	5,954	4,228	1,726	5,594	3,899	1,695	360	329	31
1969[1]	6,319	4,564	1,755	5,997	4,268	1,729	322	296	26
1970[1]	6,721	4,937	1,783	6,299	4,539	1,761	421	399	22
1971[1]	7,003	5,218	1,785	6,482	4,727	1,755	522	491	30
1972[2]	7,255	5,454	1,801	6,648	4,877	1,771	607	577	30
1973[2]	7,454	5,630	1,824	6,730	4,948	1,782	724	682	42
1974[2]	7,806	5,945	1,861	7,015	5,196	1,819	791	749	42
					PROJECTED[3]				
1975	8,064	6,190	1,874	7,214	5,385	1,829	850	805	45
1976	8,286	6,400	1,886	7,377	5,539	1,838	909	861	48
1977	8,473	6,579	1,894	7,510	5,668	1,842	963	911	52
1978	8,627	6,732	1,895	7,612	5,772	1,840	1,015	960	55
1979	8,728	6,843	1,885	7,667	5,839	1,828	1,061	1,004	57
1980	8,801	6,931	1,870	7,698	5,887	1,811	1,103	1,044	59
1981	8,827	6,980	1,847	7,692	5,906	1,786	1,135	1,074	61
1982	8,818	6,997	1,821	7,653	5,894	1,759	1,165	1,103	62
1983	8,690	6,920	1,770	7,510	5,803	1,707	1,180	1,117	63
1984	8,511	6,794	1,717	7,325	5,673	1,652	1,186	1,121	65

[1] Estimates were based on the assumption that the 1964 percentage of part-time enrollment equivalent to full-time enrollment (33 percent for degree-credit students and 28 percent for non-degree-credit students) would remain constant through 1971.

[2] Full-time-equivalent enrollment as reported by the individual institutions.

[3] Projections are based on the assumption that the 1974 percentage of part-time enrollment equivalent to full-time enrollment (37.3 percent for degree-credit students and 36.8 for non-degree-credit students) will remain constant through 1984.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

Final revised figures for fall 1973 opening fall enrollment in institutions of higher education are slightly different from those shown in the table.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Opening (Fall) Enrollment in Higher Education*, annually, 1963 through 1968, 1971 through 1974, (2) *Fall Enrollment in Higher Education, Supplementary Information*, 1969 and 1970, (3) unpublished data from *Resident and Extension Enrollment in Institutions of Higher Education*, fall 1966 and 1967, and (4) Sample survey of full-time-equivalent enrollments and credit hours, fall 1964 (unpublished).

Table 13.—Summary of degree-credit enrollment in all institutions of higher education, by level and institutional type: United States, fall 1964 to 1984

[In thousands]

Year (fall)	Total degree-credit enrollment	Graduate (4-year)[1]	Undergraduate and first-professional (4-year)			Undergraduate (2-year)		
			Total[1]	First-time	Other[1]	Total	First-time	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1964	4,950	608	3,631	903	2,728	711	322	389
1965	5,526	697	3,988	1,041	2,947	841	401	441
1966[2]	5,928	768	4,216	989	3,227	945	389	556
1967[2]	6,406	849	4,476	992	3,484	1,081	447	634
1968	6,928	885	4,754	1,086	3,668	1,289	554	735
1969	7,484	955	5,000	1,107	3,893	1,528	642	886
1970	7,920	1,031	5,259	1,126	4,133	1,630	654	976
1971	8,116	1,012	5,379	1,096	4,283	1,725	670	1,055
1972	8,265	1,066	5,407	1,065	4,342	1,792	675	1,117
1973	8,520	1,123	5,475	1,076	4,399	1,921	681	1,241
1974	9,023	1,190	5,635	1,128	4,507	2,198	727	1,471
				PROJECTED[3]				
1975	9,328	1,232	5,761	1,134	4,627	2,335	759	1,576
1976	9,585	1,268	5,860	1,127	4,733	2,457	779	1,678
1977	9,805	1,303	5,941	1,116	4,825	2,561	800	1,761
1978	9,978	1,332	5,982	1,111	4,871	2,664	826	1,838
1979	10,091	1,347	5,997	1,096	4,901	2,747	842	1,906
1980	10,173	1,367	5,987	1,066	4,921	2,819	850	1,969
1981	10,203	1,370	5,959	1,037	4,922	2,874	854	2,020
1982	10,188	1,380	5,902	992	4,910	2,906	847	2,059
1983	10,030	1,358	5,770	936	4,834	2,902	827	2,075
1984	9,811	1,336	5,603	889	4,714	2,872	815	2,057

[1] Estimated. See appendix A, "Estimation Methods," secs. 3a, 3b, 3h, and 3j.

[2] The breakdown between degree-credit and nondegree-credit enrollment in 1966 and 1967 is estimated. See appendix A, "Estimation Methods," secs. 3d and 3f.

[3] The projection of graduate enrollment in 4-year institutions is the same as that shown in table 17.

The projection of undergraduate and first-professional degree-credit enrollment in 4-year institutions is the same as that shown in table 19.

The projection of undergraduate degree-credit enrollment in 2-year institutions of higher education is the same as that shown in table 8.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Opening (Fall) Enrollment in Higher Education*, annually, 1963 through 1968, 1971 through 1974, (2) *Fall Enrollment in Higher Education, Supplementary Information*, 1969 and 1970; (3) *Residence and Migration of College Students, Fall 1968; Basic State to State Matrix Tables;* and (4) unpublished data from *Resident and Extension Enrollment in Institutions of Higher Education*, fall 1966 and fall 1967.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

Final revised figures for fall 1973 opening fall enrollment in institutions of higher education are slightly different from those shown in the table.

Table 14.—First-time degree-credit enrollment in all institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1964 to 1984

[Resident and extension opening fall enrollment]

Year (fall)	Total first-time degree-credit enrollment	Sex		Attendance status[1]		Control	
		Men	Women	Full-time	Part-time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1964	1,224,840	701,524	523,316	1,014,000	210,000	814,664	410,176
1965	1,441,822	829,215	612,607	1,192,000	250,000	990,021	451,801
1966[2]	1,378,000	787,000	591,000	1,140,000	238,000	947,000	430,000
1967[2]	1,439,000	814,000	626,000	1,182,000	257,000	1,024,000	415,000
1968	1,629,751	924,580	705,171	1,328,329	301,422	1,200,784	428,967
1969	1,748,655	985,719	762,936	1,404,508	344,147	1,309,359	439,296
1970	1,780,119	983,794	796,325	1,426,488	353,631	1,337,896	442,223
1971	1,765,625	967,859	797,766	1,411,032	354,593	1,339,177	426,448
1972	1,740,438	928,804	811,634	1,369,316	371,122	1,322,903	417,535
1973	1,756,854	930,783	826,071	1,361,942	394,912	1,342,536	414,318
1974	1,854,442	972,707	881,735	1,408,958	445,484	1,435,981	418,461
				PROJECTED[3]			
1975	1,893,000	991,000	902,000	1,428,000	465,000	1,474,000	419,000
1976	1,906,000	996,000	910,000	1,427,000	479,000	1,492,000	414,000
1977	1,916,000	1,000,000	916,000	1,426,000	490,000	1,509,000	407,000
1978	1,937,000	1,012,000	925,000	1,432,000	505,000	1,534,000	403,000
1979	1,938,000	1,012,000	926,000	1,424,000	514,000	1,542,000	396,000
1980	1,916,000	1,000,000	916,000	1,400,000	516,000	1,531,000	385,000
1981	1,891,000	988,000	903,000	1,374,000	517,000	1,519,000	372,000
1982	1,839,000	960,000	879,000	1,330,000	509,000	1,483,000	356,000
1983	1,763,000	920,000	843,000	1,269,000	494,000	1,429,000	334,000
1984	1,704,000	890,000	814,000	1,221,000	483,000	1,388,000	316,000

[1] Estimated for all years prior to 1968. See appendix A, "Estimation Methods," sec. 2b.

[2] The breakdown between degree-credit and nondegree-credit enrollment in 1966 and 1967 is estimated. See appendix A, "Estimation Methods," sec. 2a.

[3] The projection of first-time opening fall degree-credit enrollment in all institutions of higher education by sex is based primarily on the assumption that full-time first-time enrollment, expressed as a percentage of the population averaging 18 years of age, will remain constant at the 1974 rate.

The projection of first-time opening fall degree-credit enrollment by control and type of institution is based on the assumption that, for each sex, the percentage distribution of first-time degree-credit enrollment by type and control of institution will follow the 1964—1974 trend through 1984.

The projection of first-time degree-credit enrollment by attendance status is based on the assumption that, for men and women separately, full-time first-time degree-credit enrollment, expressed as a percentage of total first-time degree-credit enrollment, will follow the 1964—1974 trend through 1984.

For further methodological details, see appendix A, table A-1.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

SOURCES: Enrollment data from U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Opening (Fall) Enrollment in Higher Education*, annually, 1964 through 1968, 1971 through 1974, (2) *Fall Enrollment in Higher Education, Supplemental Information*, 1969 and 1970, and (3) data from *Resident and Extension Enrollment in Institutions of Higher Education*, fall 1966 (unpublished).

Population on which projections are based is shown in appendix B, table B-2.

Table 15.—First-time degree-credit enrollment in 4-year institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1964 to 1984

[Resident and extension opening fall enrollment]

Year (fall)	Total first-time degree-credit enrollment	Sex		Attendance status[1]		Control	
		Men	Women	Full-time	Part-time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1964	902,599	508,117	394,482	802,000	100,000	539,251	363,348
1965	1,041,025	587,789	453,236	929,000	112,000	642,233	398,792
1966[2]	989,000	555,000	434,000	884,000	105,000	610,000	379,000
1967[2]	992,000	548,000	444,000	889,000	103,000	628,000	364,000
1968	1,076,077	591,443	484,634	966,094	109,983	705,891	370,186
1969	1,107,116	608,089	499,027	994,586	112,530	721,963	385,153
1970	1,126,368	608,823	517,545	1,013,031	113,337	736,879	389,489
1971	1,095,547	585,393	510,154	991,521	104,026	719,405	376,142
1972	1,065,128	560,035	505,093	968,578	96,550	693,283	371,845
1973	1,075,827	562,023	513,804	967,907	107,920	706,029	369,798
1974	1,127,794	585,923	541,871	1,005,802	121,992	753,795	373,999
	PROJECTED[3]						
1975	1,134,000	590,000	544,000	1,012,000	122,000	759,000	375,000
1976	1,127,000	588,000	539,000	1,005,000	122,000	755,000	372,000
1977	1,116,000	584,000	532,000	995,000	121,000	749,000	367,000
1978	1,111,000	585,000	526,000	991,000	120,000	746,000	365,000
1979	1,096,000	579,000	517,000	978,000	118,000	737,000	359,000
1980	1,066,000	566,000	500,000	951,000	115,000	717,000	349,000
1981	1,037,000	554,000	483,000	925,000	112,000	699,000	338,000
1982	992,000	532,000	460,000	886,000	106,000	668,000	324,000
1983	936,000	505,000	431,000	835,000	101,000	632,000	304,000
1984	889,000	482,000	407,000	794,000	95,000	601,000	288,000

[1] Estimated for all years prior to 1968. See appendix A, "Estimation Methods," sec. 2b.

[2] The breakdown between degree-credit and non-degree-credit enrollment in 1966 and 1967 is estimated. See appendix A, "Estimation Methods," sec 2a.

[3] For assumptions underlying these projections, see footnotes to table 14. For methodological details, see appendix A, table A-1.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

SOURCE: Enrollment data from U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Opening (Fall) Enrollment in Higher Education*, annually, 1964 through 1968, 1971 through 1974, (2) *Fall Enrollment in Higher Education, Supplementary Information*, 1969 and 1970, and (3) data from *Resident and Extension Enrollment in Institutions of Higher Education*, fall 1966 (unpublished).

Population on which projections are based is shown in appendix B, table B-2.

Table 16.—First-time degree-credit enrollment in 2-year institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1964 to 1984

[Resident and extension opening fall enrollment]

Year (fall)	Total first-time degree-credit enrollment	Sex		Attendance status[1]		Control	
		Men	Women	Full-time	Part-time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1964	322,241	193,407	128,834	212,000	110,000	275,413	46,828
1965	400,797	241,426	159,371	263,000	138,000	347,788	53,009
1966[2]	389,000	232,000	157,000	255,000	134,000	337,000	51,000
1967[2]	447,000	266,000	181,000	292,000	155,000	396,000	51,000
1968	553,674	333,137	220,537	362,235	191,439	494,893	58,781
1969	641,539	377,630	263,909	409,922	231,617	587,396	54,143
1970	653,751	374,971	278,780	413,457	240,294	601,017	52,734
1971	670,078	382,466	287,612	419,511	250,567	619,772	50,306
1972	675,310	368,769	306,541	400,738	274,572	629,620	45,690
1973	681,027	368,760	312,267	394,035	286,992	636,507	44,520
1974	726,648	386,784	339,864	403,156	323,492	682,186	44,462
				PROJECTED[3]			
1975	759,000	401,000	358,000	416,000	343,000	715,000	44,000
1976	779,000	408,000	371,000	422,000	357,000	737,000	42,000
1977	800,000	416,000	384,000	431,000	369,000	760,000	40,000
1978	826,000	427,000	399,000	441,000	385,000	738,000	38,000
1979	842,000	433,000	409,000	446,000	396,000	805,000	37,000
1980	850,000	434,000	416,000	449,000	401,000	814,000	36,000
1981	854,000	434,000	420,000	449,000	405,000	820,000	34,000
1982	847,000	428,000	419,000	444,000	403,000	815,000	32,000
1983	827,000	415,000	412,000	434,000	393,000	797,000	30,000
1984	815,000	408,000	407,000	427,000	388,000	787,000	28,000

[1] Estimated for all years prior to 1968. See appendix A, "Estimation Methods," sec. 2b.

[2] The breakdown between degree-credit and non-degree-credit enrollment in 1966 and 1967 is estimated. See appendix A, "Estimation Methods," sec. 2a.

[3] For assumptions underlying these projections, see footnotes to table 14. For methodological details, see appendix A, table A-1.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

SOURCES: Enrollment data from U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Opening (Fall) Enrollment in Higher Education*, annually, 1964 through 1968, 1971 through 1974, (2) *Fall Enrollment in Higher Education, Supplementary Information*, 1969 and 1970, and (3) data from *Resident and Extension Enrollment in Institutions of Higher Education*, fall 1966 (unpublished).

Population on which projections are based is shown in appendix B, table B-2.

Table 17.—Graduate enrollment in 4-year institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1964 to 1984[1]

[In thousands]

Year (fall)	Total graduate degree-credit enrollment	Sex		Attendance status		Control	
		Men	Women	Full-time	Part-time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1964[2]	608	410	198	221	387	378	230
1965[2]	697	465	232	256	441	440	257
1966[2]	768	503	265	285	483	489	279
1967[2]	849	547	302	317	532	550	299
1968[2]	885	558	327	337	548	584	301
1969	955	590	366	364	591	666	289
1970	1,031	632	399	379	652	724	307
1971	1,012	615	397	388	624	712	300
1972	1,066	627	439	393	673	757	308
1973	1,123	647	476	409	714	799	324
1974	1,190	663	527	428	762	852	338
				PROJECTED[3]			
1975	1,232	683	549	442	790	885	347
1976	1,268	702	566	455	813	913	355
1977	1,303	716	587	467	836	942	361
1978	1,332	731	601	477	855	966	366
1979	1,347	736	611	482	865	980	367
1980	1,367	745	622	489	878	998	369
1981	1,370	745	625	490	880	1,003	367
1982	1,380	748	632	493	887	1,013	367
1983	1,358	733	625	485	873	1,000	358
1984	1,336	721	615	477	859	986	350

[1] Includes resident and extension graduate degree-credit enrollment. The estimates, 1964–1968, and data, 1969–1972, differ from figures in 1973 and earlier editions of *Projections of Educational Statistics* because they include extension graduate enrollment, which previously was included in undergraduate and first-professional degree-credit enrollment figures.

[2] For method of estimating total graduate enrollment, 1964 to 1968, see appendix A, "Estimation Methods," secs. 3a, 3b, 3h, 3i, 3k, and 3l.

[3] The projection of graduate enrollment is based primarily on the assumptions that, for each sex, full-time graduate enrollment expressed as a percentage of full-time undergraduate and unclassified enrollment will follow the 1968–1974 trend through 1984, and that the percentage that full-time graduate enrollment is of total graduate enrollment will remain constant at the 1974 level through 1984. For methods and assumptions used to project full-time undergraduate and unclassified degree-credit enrollment, see footnote 2, table 6.

The projection of total graduate enrollment by control of institution is based on the assumption that public graduate enrollment expressed as a percentage of total graduate enrollment will follow the 1968–1974 trend through 1984.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Opening (Fall) Enrollment in Higher Education*, annually, 1964 through 1968, 1971 through 1974, (2) *Fall Enrollment in Higher Education, Supplementary Information*, 1969 and 1970, (3) unpublished data from *Resident and Extension Enrollment in Institutions of Higher Education*, fall 1966 and 1967, and (4) *Residence and Migration of College Students*, fall 1968.

Table 18.—Undergraduate and first-professional degree-credit enrollment in all institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1964 to 1984[1]

[In thousands]

Year (Fall)	Total undergraduate degree-credit enrollment	Sex		Attendance status		Control	
		Men	Women	Full-time	Part-time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1964[2]	4,342	2,623	1,719	3,196	1,145	2,802	1,541
1965[2]	4,829	2,910	1,919	3,654	1,175	3,184	1,645
1966[2]	5,160	3,074	2,086	3,940	1,220	3,451	1,709
1967[2]	5,557	3,275	2,282	4,239	1,318	3,810	1,747
1968[2]	6,043	3,561	2,482	4,600	1,443	4,308	1,735
1969	6,529	3,829	2,700	4,890	1,639	4,749	1,780
1970	6,889	4,005	2,884	5,110	1,779	5,076	1,813
1971	7,104	4,102	3,002	5,289	1,816	5,302	1,802
1972	7,199	4,074	3,125	5,253	1,945	5,401	1,799
1973	7,397	4,125	3,271	5,275	2,122	5,589	1,807
1974	7,833	4,306	3,527	5,389	2,444	5,986	1,847
				PROJECTED			
1975	8,096	4,449	3,647	5,514	2,582	6,236	1,860
1976	8,317	4,567	3,750	5,609	2,708	6,448	1,869
1977	8,502	4,665	3,837	5,679	2,823	6,628	1,874
1978	8,646	4,740	3,906	5,727	2,919	6,776	1,870
1979	8,744	4,793	3,951	5,744	3,000	6,884	1,860
1980	8,806	4,827	3,979	5,736	3,070	6,965	1,841
1981	8,833	4,846	3,987	5,708	3,125	7,014	1,819
1982	8,808	4,833	3,975	5,652	3,156	7,017	1,791
1983	8,672	4,757	3,915	5,526	3,146	6,932	1,740
1984	8,475	4,655	3,820	5,368	3,107	6,794	1,681

[1] The estimates for 1964 through 1968 and projections of undergraduate degree-credit enrollment in all institutions, by sex, attendance status, and institutional control, are calculated by summing the degree-credit enrollment in 2-year institutions (table 8) and corresponding categories of undergraduate degree-credit enrollment in 4-year institutions (table 19).

[2] The estimates, 1964–1968, and data, 1969–1972, differ from figures in 1973 and earlier editions of *Projections of Educational Statistics* because they exclude extension graduate enrollment, which previously was included in undergraduate and first-professional degree-credit enrollment figures.

For further methodological details, see appendix A, table A-1.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

Final revised figures for fall 1973 opening fall enrollment in institutions of higher education are slightly different from those shown in the table.

SOURCE: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Opening (Fall) Enrollment in Higher Education*, annually, 1964 through 1968, 1971 through 1974, (2) *Fall Enrollment in Higher Education, Supplementary Information*, 1969 and 1970, (3) unpublished data from *Resident and Extension Enrollment in Institutions of Higher Education*, fall 1966 and 1967; and, (4) *Residence and Migration of College Students*, fall 1968.

Table 19.—Undergraduate and first-professional degree-credit enrollment in 4-year institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1964 to 1984[1]

[In thousands]

Year (fall)	Total undergraduate degree-credit enrollment	Sex		Attendance status		Control	
		Men	Women	Full-time	Part-time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1964[2]	3,631	2,183	1,448	2,800	831	2,181	1,451
1965[2]	3,988	2,388	1,600	3,159	829	2,447	1,541
1966[2]	4,216	2,497	1,719	3,377	839	2,611	1,604
1967[2]	4,476	2,623	1,853	3,623	853	2,843	1,634
1968[2]	4,754	2,779	1,975	3,861	893	3,139	1,615
1969	5,000	2,919	2,081	4,041	959	3,336	1,664
1970	5,259	3,051	2,208	4,234	1,025	3,556	1,703
1971	5,379	3,099	2,280	4,358	1,021	3,679	1,700
1972	5,407	3,075	2,332	4,350	1,057	3,706	1,702
1973	5,475	3,077	2,398	4,351	1,124	3,760	1,714
1974	5,635	3,131	2,504	4,429	1,206	3,882	1,753
				PROJECTED			
1975	5,761	3,205	2,556	4,519	1,242	3,991	1,770
1976	5,860	3,264	2,596	4,585	1,275	4,076	1,784
1977	5,941	3,314	2,627	4,635	1,306	4,149	1,792
1978	5,982	3,340	2,642	4,661	1,321	4,195	1,787
1979	5,997	3,355	2,642	4,664	1,333	4,222	1,775
1980	5,987	3,357	2,630	4,645	1,342	4,231	1,756
1981	5,959	3,349	2,610	4,614	1,345	4,225	1,734
1982	5,902	3,323	2,579	4,561	1,341	4,196	1,706
1983	5,770	3,255	2,515	4,450	1,320	4,113	1,657
1984	5,603	3,170	2,433	4,317	1,286	4,003	1,600

[1] The estimates for 1964 through 1968 and projections of undergraduate degree-credit enrollment in 4-year institutions, by sex, attendance status, and institutional control, were calculated by subtracting graduate enrollment in the above categories (table 17) from corresponding categories of degree-credit enrollment in 4-year institutions (table 7).

[2] The estimates, 1964–1968, and data, 1969–1972, differ from figures in 1973 and earlier editions of *Projections of Educational Statistics* because they exclude extension graduate enrollment, which previously was included in undergraduate and first-professional enrollment figures.

For further methodological details, see appendix A, table A-1.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

Final revised figures for fall 1973 opening fall enrollment in institutions of higher education are slightly different from those shown in the table.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Opening (Fall) Enrollment in Higher Education*, annually, 1964 through 1968, 1971 through 1974, (2) *Fall Enrollment in Higher Education, Supplementary Information*, 1969 and 1970, (3) unpublished data from *Resident and Extension Enrollment in Institutions of Higher Education*, fall 1966 and 1967, and (4) *Residence and Migration of College Students*, fall 1968.

CHAPTER III

High School Graduates and Earned Degrees

Martin M. Frankel and William C. Sonnenberg

High school graduates (table 20)

The number of high school graduates increased from 2.3 million in the school year 1963–64 to an estimated 3.1 million in 1974–75 and is expected to decrease to 2.7 million in 1984–85. These figures include graduates from all regular public and nonpublic high schools in the United States and, unlike the data on enrollments in chapter II, graduates from the following schools not in the regular school system: Federal schools for Indians, schools on Federal installations, residential schools for exceptional children, and subcollegiate departments of colleges and universities. Graduates of these schools comprise less than 1 percent of all high school graduates.

Two main sources form the basis for the figures quoted above. Graduates of regular public schools are reported each fall by the State departments of education. Graduates of regular nonpublic schools are reported in surveys of the schools by the Office of Education. Other graduates included above are estimated from various auxiliary sources.

Projected high school graduates by sex and by control of school are shown in table 20. The projection of public high school graduates to 1983–84 is based on the assumption that, for boys and girls separately, high school graduates expressed as a percentage of the average 18-year-old population will remain constant at the 1973–74 rate through 1984–85.

The projection of nonpublic high school graduates assumes little or no increase in the number of graduates in line with similar assumptions regarding nonpublic secondary enrollments.

High school graduates, as a percent of the population averaging 18 years old (table B-2), increased greatly from 1963–64 to 1966–67 (66 to 74 percent for men and 71 to 77 percent for women). However, from 1966–67 to 1972–73 this percent has remained about the same, and we are projecting this percentage to remain constant at the average of the 1967–68 to 1973–74 rates through 1984–85 for both men and women.

Earned Degrees

Earned-degrees reports from individual degree-granting institutions of higher education are received each fall by the National Center for Education Statistics. These provide information on the number of degrees granted, by level and sex and by academic field of concentration. They cover degrees granted during the academic year ending in June and include degrees earned in the prior summer.

Starting with the 1972 edition of *Projections of Educational Statistics*, two major changes were made. One change—the result of basing the survey of earned degrees on a new taxonomy—produced a new breakdown of earned degrees (the fields are shown in tables 22-26) consistent with that shown in *A Taxonomy of Instructional Programs in Higher Education.* To obtain the distribution of degrees by field for the back years, the earned degrees were redistributed as well as possible to conform to the new taxonomy. For a complete listing of the instructional programs included in each field, see appendix A, "Classification of Degrees by Field of Study," pages 139–142.

The other change dealt with the principal levels of earned degrees that were reported and projected. In the years before the 1972 edition, three principal levels were projected: bachelor's, including first-professional degree; master's degrees; and doctorates. Now, bachelor's degrees and first-professional degrees are projected separately. Since 1960–61, first-professional degrees have been reported separately from bachelor's degrees, but the definitions of what constitutes a first-professional degree have not been uniform throughout the period. For that reason, no attempt was made in the past to project these degrees separately. (See appendix A, "Changes in Degree-Level Definitions," for a comparison of these definitions.) Recently, however, a stable definition of first-professional degrees has been established, and reporting is expected to be reasonably uniform in the future.

Earned degrees, by level and sex (table 21)

Projected degrees by level and sex are shown in table 21. Based on reports through 1973–74, the total numbers, by level, are expected to increase as follows:

Level of degree	Granted 1964–65	Estimated 1974–75	Projected 1984–85
Bachelor's	501,200	944,000	1,076,000
First-professional	28,800	54,700	66,900
Master's	117,200	291,700	339,800
Doctorate	16,500	36,100	42,900

Bachelor's degree projections by sex are based on the assumption that the percentage that bachelor's degrees are of first-time degree-credit enrollment 4-years earlier will follow the 1963–64 to 1973–74 trend through 1984–85.

Master's degree projections by sex are based on the assumption that the 1973–74 percentage that master's degrees were of the average first-year enrollment for advanced degrees 1 and 2 years earlier will remain constant through 1984–85.

Doctor's degree projections by sex are based primarily on the assumption that the percentage that doctor's degrees were of the average first-year enrollment for advanced degrees 7 and 8 years earlier will follow the 1963–64 to 1973–74 trend through 1984–85.

Projections of total first-professional degrees through 1984–85 were obtained by summing the projected degrees in all the individual fields.

For a more detailed description of the methodology used for projecting earned degrees, see appendix A, table A-2.

Earned degrees, by level and field (tables 22-26)

The fields presented are divided into three main groups at each level, except first-professional. These groups are (a) social sciences, (b) humanities, and (c) natural sciences and miscellaneous fields. The fields included in the three groups and the percentage distribution of degrees by level and field for the years 1964–65, 1974–75, and 1984–85 are shown in table 22. The projected number of earned degrees by field is shown in tables 23-26, one for each of the four levels.

Past projections of earned degrees by field have been primarily based on the assumption that the percentage distribution of degrees by field for each sex will either continue the trend of the last 11 years of actual data or remain at approximately the rate for the last actual year through the projected period. These are still the basic assumptions. However, in the past four editions the number of trend-line equations used has decreased greatly (chiefly because of the changes in the new taxonomy, mentioned earlier), resulting in a lack of consistency in the number of earned degrees for a number of fields of study. Therefore, for many of these fields of study, the 1973–74 percentage that earned degrees in each of these fields was of total degrees was held constant throughout the projected period. The 1970–71 through 1973–74 data are the only years of data collected with use of the new taxonomy.

Related data from independent sources, taken into consideration in making these projections, include: survey data collected by the Engineers Joint Council for projecting engineering degrees; survey data from the American Institute of Certified Public Accountants for bachelor's degree projections in accounting; data from the Health Resources Administration, Bureau of Health Manpower, for health-degree projections; and data from the American Bar Association for law-degree projections.

Bachelor's degrees, by field (tables, 22, 25)

Bachelor's degrees in all fields increased 88 percent from 1964–65 to 1974–75. However, over the next 10 years, only a 14-percent increase in the total number of bachelor's degrees is expected. Social science degrees are expected to increase from 232,000 in 1974–75 to 278,000 in 1984–85; humanities degrees from 148,000 in 1974–75 to 167,000 in 1984–85; and degrees in natural sciences and miscellaneous fields from 564,000 in 1974–75 to 631,000 in 1984–85.

Social science degrees as a percent of total degrees increased from 20 percent in 1964–65 to 25 percent in 1974–75 and are expected to increase slightly to 26 percent in 1984–85. Psychology degrees accounted for a good portion of the social science growth, increasing from 3 percent of total degrees in 1964–65 to 6 percent in 1974–75 and is expected to be 8 percent in 1984–85.

Humanities degrees as a percent of total degrees are expected to remain at about 6 percent through the 1964–65 to 1984–85 period.

Natural sciences and miscellaneous fields decreased from 64 percent of total degrees in 1964–65 to 60 percent in 1974–75 and are expected to be 59 percent in 1984–85; engineering, physical sciences, and education accounted for most of the decrease over the past 11 years. Engineering degrees decreased from 8 percent of total degrees in 1964–65 to 5 percent in 1974–75 and is expected to increase to 6 percent in 1984–85; physical sciences, from 4 percent of total degrees in 1964–65 to 2 percent in 1974–75 and is expected to remain at about 2 percent through 1984–85; education, from 23 percent of total degrees in 1964–65 to 19 percent in 1974–75 and is expected to continue decreasing, reaching 17 percent in 1984–85.

Master's degrees, by field (tables 22, 25)

Projections of master's degrees in the three areas (social sciences, humanities, and natural sciences and miscellaneous fields) show increases over the 1974–75 estimated amounts.

From 1964–65 to 1974–75, degrees in these areas show increases over the 1974–75 estimated amounts.

From 1964–65 to 1974–75, degrees in mathematics and statistics, physical sciences, engineering, and foreign languages as a percent of total degrees have shown significant decreases. However, from 1974–75 to 1984–85 degrees in all fields as percents of total degrees are expected to remain fairly stable.

Doctor's degrees, by field (tables 22, 25)

Projections of doctor's degrees in the three areas (social sciences, humanities, and natural science and miscellaneous fields) show small increases over the 1974–75 estimated amounts.

Education degrees have increased from 2,682 (16 percent of total degrees) in 1964–65 to an estimated 8,020 (22 percent of total degrees) in 1974–75 and is expected to increase to 12,840 (30 percent of total degrees) in 1984–85.

Although the numbers of degrees in engineering and physical sciences have increased by 66 percent and 47 percent, respectively, from 1964–65 to 1974–75, they have nevertheless decreased sharply as a percent of total degrees. During the next 10 years both the numbers of degrees and the percents of total degrees in both fields are expected to decrease. Engineering degrees increased from 2,133 (13 percent of total degrees) in 1964–65 to 3,310 (10 percent of total degrees) in 1974–75 and is expected to decrease to 2,680 (6 percent of total degrees) in 1984–85. Physical sciences degrees increased from 2,829 (17 percent of total degrees) in 1964–65 to 3,610 (10 percent of total degrees) in 1974–75 and is expected to decrease to 3,040 (7 percent of total degrees) in 1984–85.

First-professional degrees, by field (table 26)

Data from independent sources were used extensively in making projections of first-professional degrees by field of study. The following methods were used to project these degrees: Medicine, dentistry, and other health professions were projected by the Health Resources Administration, Bureau of Health Manpower. Law-degree projections were based on unpublished projections of first-year law students provided by the American Bar Association. The projections of theology and other degrees for 1974–75 through 1983–84 were based on the assumption that the number of degrees in this field will remain at the 1973–74 level through 1984–85.

Law degrees, which have increased from 10,782 in 1964–65 to 28,290 in 1974–75 are expected to increase much more slowly during the next 10 years, reaching 33,010 in 1984–85.

Degrees in medicine increased from 7,304 in 1964–65 to 12,730 in 1974–75 and are expected to continue increasing, reaching 17,920 in 1984–85.

Table 20.—High school graduates, by sex and by institutional control: United States, 1963–64 to 1984–85

[In thousands]

Year	Total high school graduates[1]	Sex		Control	
		Boys	Girls	Public	Private (estimated)
(1)	(2)	(3)	(4)	(5)	(6)
1963–64 . . .	2,290	1,123	1,167	2,015	[2]275
1964–65 . . .	2,665	1,314	1,351	2,366	[2]298
1965–66 . . .	2,632	1,308	1,325	2,334	298
1966–67 . . .	2,679	1,332	1,348	2,381	298
1967–68 . . .	2,702	1,341	1,360	2,402	300
1968–69 . . .	2,829	1,402	1,427	2,529	300
1969–70 . . .	2,896	1,433	1,463	2,596	300
1970–71 . . .	2,943	1,456	1,487	2,643	300
1971–72 . . .	3,006	1,490	1,516	2,706	300
1972–73 . . .	3,037	1,501	1,536	2,737	300
1973–74 . . .	3,069	1,512	1,557	2,769	300
1974–75[3] . .	3,139	1,564	1,585	2,839	300
			PROJECTED[4]		
1975–76 . . .	3,137	1,552	1,585	2,837	300
1976–77 . . .	3,135	1,551	1,584	2,835	300
1977–78 . . .	3,146	1,567	1,589	2,846	300
1978–79 . . .	3,128	1,549	1,579	2,828	300
1979–80 . . .	3,083	1,527	1,556	2,783	300
1980–81 . . .	3,033	1,503	1,530	2,733	300
1981–82 . . .	2,943	1,457	1,486	2,643	300
1982–83 . . .	2,822	1,397	1,425	2,522	300
1983–84 . . .	2,728	1,351	1,377	2,428	300
1984–85 . . .	2,680	1,327	1,353	2,380	300

[1] Includes regular public and nonpublic schools, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians,and federally operated schools on Federal installations. Excludes equivalency certificates. More than 99 percent of public school graduates and 97 percent of nonpublic school graduates are graduates of regular day schools.

[2] Reported data from Office of Education surveys.

[3] Estimated.

[4] The projection of public high school graduates is based on the assumption that for boys and girls separately, the number of high school graduates expressed as a percentage of the population averaging 18 years of age will remain constant at the average of the rates for 1968 to 1974.

The projection of nonpublic high school graduates is based on the following assumptions: (1) the number of nonpublic high school graduates will remain approximately the same throughout the projection period. (2) The percentage of boys among nonpublic high school graduates (48.1 percent in 1964–65) will remain constant to 1984–85.

For further methodological details, see appendix A, table A-2.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

SOURCES: High school graduate data and estimates are based on U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Statistics of Public Schools*, annually, fall 1964 through 1974, (2) *Statistics of Nonpublic Elementary and Secondary Schools*, 1965–66, and (3) *Nonpublic School Enrollments in Grades 9–12, Fall 1964, and Graduates, 1963–64.*

Table 21.—Earned degrees, by level and by sex of student: United States, 1963-64 to 1984-85

Year	Bachelor's degrees [1]			First-professional degrees [2]			Master's degrees [3]			Doctor's degrees (except first-professional) [4]		
	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1963–64	466,486	269,861	196,625	27,667	26,815	852	106,551	70,339	36,212	14,490	12,955	1,535
1964–65	501,248	288,538	212,710	28,755	27,748	1,007	117,152	77,544	39,608	16,467	14,692	1,775
1965–66	520,248	299,196	221,052	30,799	29,657	1,142	140,548	93,063	47,485	18,237	16,121	2,116
1966–67	558,075	322,171	235,904	32,472	31,178	1,294	157,707	103,092	54,615	20,617	18,163	2,454
1967–68	631,923	357,270	274,653	34,787	33,237	1,550	176,749	113,519	63,230	23,089	20,183	2,906
1968–69	728,167	409,881	318,286	36,018	34,499	1,519	193,756	121,531	72,225	26,188	22,752	3,436
1969–70	791,510	450,234	341,276	35,724	33,940	1,784	208,291	125,624	82,667	29,866	25,890	3,976
1970–71	839,730	475,594	364,136	37,946	35,544	2,402	230,509	138,146	92,363	32,107	27,530	4,577
1971–72	887,273	500,590	386,683	43,411	40,723	2,688	251,633	149,550	102,083	33,363	28,090	5,273
1972–73[5]	922,130	517,980	404,150	50,100	46,570	3,530	263,340	154,480	108,860	34,630	28,450	6,180
1973–74[5]	945,870	527,390	418,480	53,660	48,390	5,270	277,030	157,840	119,190	33,810	27,360	6,450
1974–75[6]	944,000	522,000	422,000	54,700	47,700	7,000	291,700	160,500	131,200	36,100	28,500	7,600
						PROJECTED[7]						
1975–76	936,000	504,000	432,000	58,200	48,900	9,300	305,300	165,100	140,200	37,600	29,100	8,500
1976–77	952,000	509,000	443,000	59,400	48,800	10,600	315,800	169,700	146,100	39,500	30,300	9,200
1977–78	1,011,000	535,000	476,000	60,600	49,300	11,300	323,800	173,700	150,100	39,700	30,100	9,600
1978–79	1,038,000	548,000	490,000	61,900	50,000	11,900	331,900	176,800	155,100	39,000	29,100	9,900
1979–80	1,062,000	565,000	497,000	62,700	50,200	12,500	337,800	179,800	158,000	39,400	28,600	10,800
1980–81	1,064,000	560,000	504,000	63,800	50,700	13,100	342,400	181,400	161,000	40,200	28,400	11,800
1981–82	1,082,000	570,000	512,000	64,800	51,200	13,600	345,400	182,400	163,000	41,100	28,500	12,600
1982–83	1,089,000	574,000	515,000	65,900	51,700	14,200	346,900	182,900	164,000	41,800	28,700	13,100
1983–84	1,084,000	571,000	513,000	66,400	51,800	14,600	345,400	181,400	164,000	42,600	29,100	13,500
1984–85	1,076,000	568,000	508,000	66,900	51,900	15,000	339,800	177,800	162,000	42,900	28,900	14,000

[1] In the 1971 and prior editions of *Projections of Educational Statistics*, bachelor's degrees were not shown separately but were combined with first-professional degrees.

[2] The following specified degrees are reported as first-professional: Dentistry (D.D.S. or D.M.D.), law (LL.B. or J.D.), medicine (M.D.), theology, veterinary medicine (D.V.M.), chiropody or podiatry (D.S.C. or D.P.), optometry (O.D.), and osteopathy (D.O.).

[3] Master's degrees differ from those published in the 1968 and prior editions of *Projections of Educational Statistics* because of adjustments to secure comparability with current reports of these degrees. For estimation details, see appendix A, "Estimation Methods," section 1. Master's degrees also differ from those published in the 1969 through 1971 editions because of discrepancies among the reported numbers of degrees.

[4] Doctor's degrees include the Ph.D. in any field as well as such degrees as doctor of education, doctor of juridical science, and doctor of public health (preceded by a professional degree in medicine or sanitary engineering). They exclude degrees defined as first-professional, such as doctor of veterinary medicine.

[5] Preliminary data rounded to tens.

[6] Estimated.

[7] The estimation and projection of degrees by level and sex of student are based on the following assumptions:

(A) The estimates of bachelor's degrees by sex for 1974–75 and the projections of these degrees through 1984–85 assume that the percentage that degrees in these years are of first-time degree-credit enrollment 4 years earlier will follow the 1963–64 to 1973–74 trend through 1984–85; the projections for 1978–79 through 1984–85 are based on the projected first-time degree-credit enrollment figures in table 14.

(B) The estimates of total first-professional degrees for 1974–75 and the projections of these degrees through 1984–85 were obtained by summing the number of degrees in the individual field. (For methods of projecting first-professional degrees in individual fields see footnotes to table 26.) The estimates of first-professional degrees by sex for 1974–75 and the projections of these degrees through 1984–85 assume that the percentage of degrees conferred on women in each field of study would follow the 1963–64 to 1976–77 trend through 1984–85. For 1974–75 through 1976–77, the estimate of the percentage of degrees conferred on women in each field was assumed to be the same as the percentage of women enrolled in the first year of first-professional programs in the same field either 3 or 4 years earlier. For law and "theology and other," a 3-year time lag was used. For medicine, dentistry, and "other health profession" a 4-year time lag was used.

(C) The estimates of master's degrees by sex for 1974–75 and projections through 1984–85 assume that the percentage that master's degrees are of the average of first-year enrollment for advanced degrees 1 and 2 years earlier will follow the 1963–64 to 1973–74 trend through 1984–85. The estimates of first-year enrollment for advanced degrees by sex for 1974 and projections through 1984 assume that the 1973 percentage that first-year enrollment for advanced degrees was of graduate enrollment will remain constant through 1984–85 (48.2 percent for men and 52.5 percent for women).

(D) The estimates of doctor's degrees by sex for 1974–75 and projections through 1984–85 assume that the percentage that doctor's degrees are of the average of first-year enrollment for advanced degrees 7 and 8 years earlier will follow the 1963–64 to 1973–74 trend through 1984–85.

For further methodological details, see appendix A, table A-2.

NOTE.—Data include 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

SOURCES: Degree and enrollment data and estimates are based on (1) U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (a) *Earned Degrees Conferred by Institutions of Higher Education*, 1963–64 through 1973–74, (b) *Opening (Fall) Enrollment in Higher Education*, 1963 through 1968 and 1971 through 1974, (c) *Enrollment for Advanced Degrees*, fall 1961, 1962 and 1963, (d) *Enrollment for Master's and Higher Degrees, Fall 1964*, (e) *Enrollment for Master's and Higher Degrees, Fall 1965: Summary Report*, (f) *Students Enrolled for Advanced Degrees*, fall 1966 through 1973, (g) *Fall enrollment in Higher Education, Supplementary Information*, 1969 and 1970; and (2) American Bar Association publication: Millard H. Ruud, "That Burgeoning Law School Enrollment Slows," *American Bar Association Journal*, 59: 150–153, February 1973.

Table 22.—Percentage distribution of earned degrees, by field of study and level: United States, 1964–65 to 1984–85

Year	A. Social sciences					B. Humanities					
	Total social sciences	Social science	Psychology	Public affairs and services	Library sciences	Total humanities	Architecture and environmental design	Fine and applied arts	Foreign languages	Communications	Letters
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
						Bachelor's					
1964–65	19.8	16.4	2.9	0.4	0.1	16.0	0.5	3.5	2.8	0.6	8.7
1974–75	24.6	16.1	5.7	2.6	0.1	15.7	0.9	4.2	2.0	1.9	6.8
1984–85	25.8	14.7	7.7	3.3	0.1	15.5	1.1	4.3	1.6	2.6	5.9
						Master's					
1964–65	16.0	8.2	1.9	3.1	2.7	12.1	0.3	3.6	2.3	0.3	5.6
1974–75	16.5	6.5	2.4	4.6	3.0	10.6	1.0	2.9	1.4	1.0	4.4
1984–85	16.6	5.8	2.5	5.3	3.0	10.1	1.4	2.9	1.0	1.2	3.7
						Doctor's					
1964–65	16.9	11.2	5.1	0.5	0.1	11.2	0.1	2.6	2.3	0.1	6.2
1974–75	20.1	11.8	7.4	0.7	0.2	13.2	0.2	1.7	2.8	0.5	7.9
1984–85	21.3	10.6	9.3	1.2	0.2	11.9	0.4	1.6	1.6	0.5	7.9

Table 22.—Percentage distribution of earned degrees, by field of study and level: United States, 1964–65 to 1984–85—Continued

Year	Total natural sciences and miscellaneous fields	Mathematics and statistics	Computer and information sciences	Engineering	Physical sciences	Biological sciences	Agriculture and natural resources	Health professions	Accounting	Other business and management	Education	Other
	C. Natural sciences and miscellaneous fields											
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
						Bachelor's						
1964–65 . .	64.2	3.9	(L)	7.7	3.6	5.0	1.5	3.1	3.0	9.6	23.2	3.7
1974–75 . .	59.7	2.2	0.5	5.0	2.2	5.1	1.7	4.5	3.4	10.8	19.4	4.8
1984–85 . .	58.6	1.7	0.9	5.7	2.1	4.9	1.8	5.4	3.9	10.3	17.3	4.8
						Master's						
1964–65 . .	71.9	3.6	0.1	10.3	4.2	3.1	1.4	2.1	0.5	6.0	37.0	3.5
1974–75 . .	72.9	1.7	0.9	5.4	2.1	2.3	1.0	3.6	0.7	10.8	41.0	3.4
1984–85 . .	73.3	1.3	1.5	5.1	1.6	2.2	1.0	4.3	0.9	10.5	41.6	3.4
						Doctor's						
1964–65 . .	71.9	4.1	(L)	13.0	17.2	11.7	4.0	1.1	0.2	1.8	16.3	2.6
1974–75 . .	66.8	2.9	0.8	9.8	10.0	10.2	2.8	1.7	0.2	2.9	22.2	3.4
1984–85 . .	66.8	1.7	0.8	6.2	7.1	9.3	2.2	3.0	0.2	3.0	29.9	3.3

NOTE.—Data are for 50 States and the District of Columbia for all years.
Because of rounding, details may not add to totals.

L–less than 0.05

Table 23.—Earned bachelor's degrees, by field of study: United States, 1963–64 to 1984–85[1]

Year	A. Social sciences					B. Humanities					
	Total social sciences	Social sciences	Psychology	Public affairs and services	Library sciences	Total humanities	Architecture and environmental design	Fine and applied arts	Foreign languages	Communications	Letters
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1963–64	90,144	74,930	13,258	1,446	510	72,965	2,059	16,159	12,160	2,560	40,027
1964–65	99,240	82,224	14,527	1,866	623	80,197	2,333	17,391	13,859	2,814	43,800
1965–66	110,723	91,198	16,841	2,042	642	87,017	2,663	18,679	15,186	3,131	47,358
1966–67	124,414	102,132	19,303	2,278	701	96,074	2,937	21,548	16,706	3,519	51,354
1967–68	145,902	118,426	23,768	2,894	814	110,344	3,262	25,521	19,128	4,363	58,070
1968–69	172,616	138,478	29,295	3,843	1,000	127,905	3,477	31,588	21,493	5,197	66,150
1969–70	190,395	151,391	33,536	4,414	1,054	134,675	4,105	35,901	20,895	5,959	67,815
1970–71	205,931	157,818	37,880	9,220	1,013	139,833	5,570	30,394	19,945	10,802	73,122
1971–72	217,768	161,081	43,093	12,605	989	144,713	6,440	33,831	18,849	12,340	73,253
1972–73[2]	225,950	159,470	47,460	17,860	1,160	147,210	6,910	36,020	18,990	14,320	70,970
1973–74[2]	231,010	154,100	51,830	23,920	1,160	148,500	7,820	39,750	18,840	17,100	64,990
1974–75[3]	231,870	152,430	53,630	24,610	1,200	148,390	8,050	39,790	18,430	17,920	64,200
						PROJECTED[4]					
1975–76	229,590	148,430	56,010	24,930	1,220	147,200	8,090	39,660	18,120	18,290	63,040
1976–77	234,030	149,040	57,740	25,990	1,260	149,280	8,470	40,320	18,110	19,200	63,180
1977–78	249,250	156,350	63,270	28,290	1,340	158,340	9,230	42,890	18,910	21,040	66,270
1978–79	257,620	159,350	67,060	29,810	1,390	162,330	9,810	44,080	18,960	22,360	67,130
1979–80	262,900	160,330	70,130	31,030	1,410	164,340	10,290	44,700	18,790	23,420	67,140
1980–81	267,720	160,970	73,110	32,210	1,430	166,030	10,750	45,280	18,540	24,470	66,990
1981–82	274,120	162,550	76,560	33,550	1,460	168,580	11,300	46,050	18,390	25,670	67,170
1982–83	277,750	162,430	79,230	34,620	1,470	169,390	11,730	46,360	18,060	26,630	66,610
1983–84	278,370	160,490	81,110	35,300	1,470	168,450	12,030	46,170	17,580	27,290	65,380
1984–85	278,140	158,200	82,650	35,830	1,460	166,870	12,320	45,810	16,980	27,890	63,870

See footnotes at end of table.

Table 23.—Earned bachelor degrees, by field of study: United States, 1963–64 to 1984–85[1]—Continued

	C. Natural sciences and miscellaneous fields											
Year (1)	Total natural sciences and miscellaneous fields (2)	Mathematics and statistics (3)	Computer and information sciences (4)	Engineering[5] (5)	Physical sciences (6)	Biological sciences (7)	Agriculture and natural resources (8)	Health professions (9)	Accounting (10)	Other business and management (11)	Education (12)	Other[6] (13)
1963–64	303,377	18,624	–	37,014	17,457	22,454	6,947	13,421	13,875	45,523	110,559	17,703
1964–65	321,811	19,460	87	38,514	17,859	24,872	7,377	15,444	14,886	48,169	116,529	18,614
1965–66	322,508	19,977	89	37,971	17,129	26,565	7,863	15,848	14,903	48,736	115,173	18,254
1966–67	337,587	21,207	222	38,696	17,739	28,483	8,636	16,541	15,593	54,418	117,482	18,570
1967–68	375,677	23,513	459	40,541	19,380	31,429	9,215	18,170	17,922	62,670	132,087	20,291
1968–69	427,646	27,209	933	45,517	21,480	34,989	10,965	20,230	20,032	74,501	148,554	23,236
1969–70	466,440	27,442	1,544	49,678	21,439	37,031	12,382	22,141	21,183	84,871	161,904	26,825
1970–71	493,966	24,801	2,388	50,046	21,412	35,743	12,672	25,226	22,099	93,428	176,571	29,580
1971–72	524,792	23,713	3,402	51,164	20,745	37,293	13,516	28,611	24,801	97,208	191,172	33,167
1972–73[2] ...	548,980	23,060	4,300	51,140	20,720	42,220	14,760	33,580	27,950	96,740	194,230	38,280
1973–74[2] ...	566,360	21,640	4,760	50,320	21,180	48,340	16,250	41,460	29,340	103,060	185,100	44,910
1974–75[3] ...	563,740	21,060	5,060	47,090	21,010	48,080	16,190	42,370	32,450	102,290	183,260	44,890
	PROJECTED[4]											
1975–76	559,210	20,180	5,270	47,370	20,270	46,920	15,740	43,410	34,940	96,620	181,890	44,610
1976–77	568,690	19,940	5,640	50,570	20,380	47,340	15,930	45,010	36,410	99,170	183,010	45,290
1977–78	603,410	20,590	6,280	56,960	21,370	49,890	16,820	48,860	37,800	103,990	192,740	48,110
1978–79	618,050	20,660	6,790	58,380	21,870	51,140	17,360	51,040	39,240	106,610	195,530	49,430
1979–80	624,760	20,410	7,280	59,190	22,120	51,770	17,760	52,570	39,940	108,020	195,590	50,110
1980–81	630,250	20,160	7,730	59,810	22,310	52,290	18,060	54,090	40,530	109,100	195,430	50,740
1981–82	639,300	20,070	8,220	60,940	22,660	53,140	18,510	55,820	41,430	111,020	195,890	51,600
1982–83	641,860	19,770	8,650	61,430	22,780	53,440	18,760	57,020	41,910	111,800	194,360	51,940
1983–84	637,180	19,190	9,020	61,190	22,630	53,140	18,840	57,640	41,910	111,170	190,740	51,710
1984–85	630,990	18,620	9,330	60,920	22,460	52,730	18,850	57,980	41,840	110,550	186,390	51,320

[1] The breakdown of earned degrees into fields shown in this table differs from the breakdown in 1971 and earlier editions. The present breakdown of earned degrees by field of study is consistent with that shown in *A Taxonomy of Instructional Programs in Higher Education.* To obtain the distribution of degrees by field for the years prior to 1970–71, earned degrees were redistributed as well as possible to conform to the new taxonomy. For a complete listing of the instructional programs included in each field, see appendix A, "Classification of Degrees by Field of Study," pages 139–142.

[2] Preliminary data rounded to tens.

[3] Estimated.

[4] The projections are based mainly on the assumption that the percentage distribution of degrees by field for each sex will continue the 1963–64 to 1973–74 trends through 1984–85 or else remain at approximately the 1973–74 rates through 1984–85. The 1970–71 through 1973–74 earned-degree data were collected under a new taxonomy of fields of study. As a result, in some fields, the 1970–71 through 1973–74 earned-degree data are not comparable with past years, making trend line analysis meaningless. Therefore, for most of these fields, the percentage that bachelor's degrees in each field was of all bachelor's degrees in 1973–74 was held constant through 1984–85. The following are exceptions to the above assumptions: (1) In engineering, data on freshman enrollment in engineering programs from the Engineering Manpower Commission of Engineers Joint Council were used in making projections. (2) In accounting, the 1974–75 through 1978–79 projections are based on projections from the American Institute of Certified Public Accountants.

[5] Includes engineering technology degrees. Engineering technology degrees, reported at about 7,500 in 1973–74, are expected to number 7,500, 7,500, 7,600, 8,100, 8,400, 8,600, 8,800, 9,100, 9,300, 9,400 and 9,400 from 1974–75 through 1984–85.

[6] Includes home economics, law, military science, theology, and interdisciplinary studies.

NOTE.–Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

SOURCES: (1) U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (a) *Earned Degrees Conferred by Institutions of Higher Education*, annually, 1963–64 through 1973–74, (b) *A Taxonomy of Instructional Programs in Higher Education*; (2) Engineering Manpower Commission of Engineers Joint Council publications: (a) *Engineering and Technology Enrollments Fall 1973*, (b) *Engineering and Technology Degrees, 1974*; and (3) American Institute of Certified Public Accountant publication: *The Supply of Accounting Graduates and the Demand for Public Accounting Recruits, Spring 1974.*

Table 24.—Earned master's degrees, by field of study: United States, 1963–64 to 1984–85[1]

Year	A. Social sciences					B. Humanities					
Year	Total social sciences	Social sciences	Psychology	Public affairs and services	Library sciences	Total humanities	Architecture and environmental design	Fine and applied arts	Foreign languages	Communications	Letters
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1963–64	16,546	8,519	2,059	3,251	2,717	12,166	383	3,673	2,196	364	5,550
1964–65	18,696	9,619	2,187	3,679	3,211	14,203	373	4,244	2,690	384	6,512
1965–66	22,541	11,616	2,423	4,586	3,916	17,667	702	5,019	3,393	523	8,030
1966–67	25,919	13,676	2,898	4,856	4,489	20,648	812	5,812	4,017	649	9,358
1967–68	28,598	14,644	3,237	5,552	5,165	22,966	1,021	6,563	4,511	730	10,141
1968–69	32,169	16,514	3,736	5,987	5,932	25,256	1,143	7,413	4,691	785	11,224
1969–70	33,878	16,659	3,953	6,755	6,511	26,305	1,427	7,849	4,803	862	11,364
1970–71	37,200	17,508	4,431	8,260	7,001	27,701	1,705	6,675	4,755	1,856	12,710
1971–72	40,454	18,417	5,289	9,365	7,383	28,975	1,899	7,537	4,616	2,200	12,723
1972–73[2]	42,860	18,340	5,830	10,990	7,700	28,620	2,310	7,250	4,300	2,410	12,350
1973–74[2]	45,590	18,410	6,590	12,460	8,130	29,430	2,700	8,000	3,960	2,640	12,130
1974–75[3]	48,070	18,970	6,970	13,360	8,770	30,990	2,900	8,430	4,140	2,830	12,690
						PROJECTED[4]					
1975–76	50,360	19,560	7,350	14,190	9,260	32,350	3,150	8,820	4,230	3,020	13,130
1976–77	52,750	20,100	7,770	15,110	9,770	33,570	3,430	9,250	4,220	3,240	13,430
1977–78	53,500	20,280	7,900	15,490	9,830	33,990	3,600	9,360	4,230	3,320	13,480
1978–79	54,910	20,530	8,150	16,110	10,120	34,650	3,820	9,580	4,220	3,460	13,570
1979–80	55,910	20,680	8,350	16,630	10,250	35,090	4,020	9,740	4,160	3,590	13,580
1980–81	56,700	20,720	8,510	17,080	10,390	35,420	4,220	9,880	4,090	3,700	13,530
1981–82	57,250	20,670	8,650	17,460	10,470	35,500	4,380	9,960	3,980	3,770	13,410
1982–83	57,540	20,530	8,750	17,760	10,500	35,490	4,550	9,990	3,860	3,870	13,220
1983–84	57,290	20,210	8,740	17,910	10,430	35,150	4,650	9,940	3,700	3,930	12,930
1984–85	56,390	19,630	8,660	17,840	10,260	34,370	4,700	9,780	3,510	3,920	12,460

See footnotes at end of table.

Table 24.—Earned master's degrees, by field of study: United States, 1963–64 to 1984–85[1]—Continued

C. Natural sciences and miscellaneous fields

Year	Total natural sciences and miscellaneous fields	Mathematics and statistics	Computer and information sciences	Engineering	Physical sciences	Biological sciences	Agriculture and natural resources	Health professions	Accounting	Other business and management	Education	Other[5]
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1963–64 . .	76,839	3,625	–	10,857	4,555	3,296	1,682	2,279	530	5,983	40,376	3,656
1964–65 . .	84,253	4,196	146	12,093	4,906	3,600	1,695	2,494	617	7,073	43,323	4,110
1965–66 . .	100,340	4,769	238	13,717	4,977	4,233	2,034	2,833	862	12,280	49,905	4,492
1966–67 . .	111,140	5,278	449	13,986	5,405	4,996	2,119	3,436	1,024	14,086	55,155	5,206
1967–68 . .	125,185	5,527	548	15,247	5,499	5,506	2,234	3,736	1,137	16,964	62,927	5,860
1968–69 . .	136,331	5,713	1,012	15,372	5,896	5,743	2,496	4,065	1,333	18,279	70,231	6,192
1969–70 . .	148,108	5,636	1,459	15,723	5,935	5,800	2,197	4,488	1,083	20,516	78,275	6,906
1970–71 . .	165,608	5,191	1,588	16,443	6,367	5,728	2,457	5,749	1,097	25,447	88,716	6,825
1971–72 . .	182,204	5,198	1,977	16,960	6,287	6,101	2,680	7,207	1,377	29,056	97,880	7,481
1972–73[2] .	191,860	5,030	2,110	16,620	6,260	6,260	2,810	8,360	1,620	29,540	105,250	8,000
1973–74[2] .	202,010	4,830	2,280	15,380	6,060	6,550	2,930	9,600	1,800	30,960	112,250	9,370
1974–75[3] .	212,640	4,880	2,560	15,650	6,050	6,800	2,990	10,420	2,080	31,640	119,710	9,870
							PROJECTED[4]					
1975–76 . .	222,590	4,920	2,860	16,110	6,110	7,010	3,090	11,180	2,370	32,660	125,960	10,320
1976–77 . .	233,480	4,950	3,220	16,590	6,140	7,220	3,210	12,150	2,500	33,800	132,890	10,810
1977–78 . .	236,310	4,920	3,470	16,950	6,130	7,330	3,270	12,300	2,550	34,490	133,960	10,940
1978–79 . .	242,340	4,890	3,760	17,250	6,110	7,440	3,330	12,840	2,760	35,160	137,590	11,210
1979–80 . .	246,800	4,870	4,060	17,540	6,080	7,530	3,400	13,300	2,840	35,800	139,990	11,400
1980–81 . .	250,280	4,820	4,340	17,690	6,040	7,560	3,430	13,710	2,900	36,180	142,060	11,550
1981–82 . .	252,650	4,750	4,610	17,790	5,960	7,580	3,460	14,040	2,950	36,440	143,420	11,650
1982–83 . .	253,870	4,600	4,850	17,830	5,880	7,570	3,470	14,340	2,990	36,600	144,000	11,680
1983–84 . .	252,960	4,550	5,050	17,680	5,750	7,480	3,460	14,510	3,000	36,350	143,510	11,620
1984–85 . .	249,040	4,400	5.170	17,330	5,550	7,310	3,380	14,520	2,970	35,680	141,300	11,430

[1] The breakdown of earned degrees into fields shown in this table differs from the breakdown in 1971 and earlier editions. The present breakdown of earned degrees by field of study is consistent with that shown in *A Taxonomy of Instructional Programs in Higher Education*. To obtain the distribution of degrees by field for the years prior to 1970–71, earned degrees were redistributed as well as possible to conform to the new taxonomy. For a complete listing of the instructional programs included in each field, see appendix A, "Classification of Degrees by field of Study," pages 139–142.

[2] Preliminary data rounded to tens.

[3] Estimated.

[4] The estimates of earned degrees for most fields for 1974–75 and projections through 1984–85 are based on the assumption that the percentage distribution of degrees by field for each sex will either continue the 1963–64 to 1973–74 trends through 1984–85 or remain at approximately the 1973–74 rate through 1984–85.

The 1970–71 through 1973–74 earned-degree data were collected under a new taxonomy of fields of study. As a result, in some fields, the 1970–71 through 1973–74 earned-degree data are not comparable with past years, making trend line analysis meaningless. Therefore, for some fields, the percentage that master's degrees in each field was of all master's degrees in 1973–74 was held constant through 1984–85.

For methodological details, see appendix A, table A-2.

[5] Includes home economics, law, military sciences, theology, and interdisciplinary studies.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

SOURCES: Degree and enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Earned Degrees Conferred by Institutions of Higher Education*, 1963–64 through 1973–74, and (2) *A Taxonomy of Instructional Programs in Higher Education*.

Table 25.—Earned doctor's degrees (except first-professional), by field of study: United States, 1963–64 to 1984–85[1]

Year	A. Social sciences					B. Humanities					
	Total social sciences	Social science	Psychology	Public affairs and services	Library sciences	Total humanities	Architecture and environmental design	Fine and applied arts	Foreign languages	Communications	Letters
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1963–64	2,677	1,659	939	66	13	1,623	3	422	326	14	868
1964–65	2,776	1,846	839	79	12	1,848	10	428	376	17	1,017
1965–66	3,129	1,980	1,037	93	19	2,061	12	476	428	15	1,130
1966–67	3,641	2,329	1,190	106	16	2,362	18	504	505	23	1,312
1967–68	4,004	2,640	1,232	110	22	2,779	15	528	610	32	1,594
1968–69	4,599	2,953	1,508	121	17	3,124	32	684	659	22	1,727
1969–70	5,383	3,592	1,620	131	40	3,476	35	734	760	17	1,930
1970–71	5,802	3,803	1,782	178	39	3,999	36	621	781	145	2,416
1971–72	6,389	4,233	1,881	211	64	4,163	50	572	841	111	2,589
1972–73[2]	6,800	4,390	2,090	220	100	4,560	60	620	990	140	2,750
1973–74[2]	6,910	4,280	2,340	230	80	4,380	70	580	920	180	2,630
1974–75[3]	7,240	4,250	2,670	260	60	4,750	80	630	1,010	180	2,850
						PROJECTED[4]					
1975–76	8,090	4,680	3,050	290	70	4,800	80	650	960	190	2,920
1976–77	8,790	5,060	3,300	360	70	5,010	100	670	960	200	3,080
1977–78	8,750	4,840	3,420	400	90	5,140	120	660	900	190	3,270
1978–79	8,440	4,370	3,520	460	90	4,940	120	640	800	190	3,190
1979–80	8,360	4,240	3,560	470	90	4,860	140	640	770	190	3,120
1980–81	8,610	4,330	3,710	480	90	4,760	160	650	640	190	3,120
1981–82	8,820	4,410	3,820	490	100	4,900	160	670	660	200	3,210
1982–83	8,910	4,440	3,870	500	100	4,960	160	660	680	200	3,260
1983–84	9,080	4,530	3,950	500	100	5,070	170	670	700	200	3,330
1984–85	9,140	4,540	4,000	500	100	5,120	160	680	700	200	3,380

See footnotes at end of table.

Table 25.—Earned doctor's degrees (except first-professional), by field of study: United States, 1963–64 to 1984–85[1] —Continued

Year	C. Na[illegible]iences and miscellaneous fields											
	Total natural sciences and miscellaneous fields	Mathematics and statistics	Computer and information sciences	Engineering	Physical sciences	B[illegible] sci[illegible]	Agriculture and natural resources	Health professions	Accounting	Other business and management	Education	Other[5]
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1963–64 . .	10,190	596	–	1,706	2,455	1,625	668	192	21	260	2,330	338
1964–65 . .	11,843	682	6	2,133	2,829	1,928	667	173	32	297	2,882	424
1965–66 . .	13,047	782	19	2,315	3,045	2,097	716	261	34	368	3,034	386
1966–67 . .	14,614	832	38	2,619	3,462	2,255	771	250	43	411	3,526	407
1967–68 . .	16,306	947	36	2,933	3,593	2,784	800	243	33	427	4,076	434
1968–69 . .	18,465	1,097	64	3,391	3,859	3,061	886	283	40	506	4,793	496
1969–70 . .	21,007	1,236	107	3,691	4,312	3,289	1,004	357	56	566	5,830	559
1970–71 . .	22,306	1,199	128	3,638	4,390	3,645	1,086	466	61	749	6,398	546
1971–72 . .	22,811	1,128	167	3,671	4,103	3,653	971	442	51	861	7,041	733
1972–73[2] .	23,270	1,070	200	3,490	4,010	3,630	1,060	530	80	850	7,310	1,040
1973–74[2] .	22,530	1,030	200	3,310	3,630	3,440	930	580	70	920	7,290	1,130
1974–75[3] .	24,110	1,050	290	3,540	3,610	3,670	1,000	600	60	1,050	8,020	1,220
						PROJECTED[4]						
1975–76 . .	24,710	1,010	360	3,370	3,630	3,740	1,010	640	70	1,180	8,450	1,260
1976–77 . .	25,700	880	350	2,880	3,480	3,810	1,010	950	70	1,210	9,750	1,310
1977–78 . .	25,810	810	350	2,670	3,170	3,840	990	1,070	90	1,180	10,320	1,320
1978–79 . .	25,620	680	350	2,680	2,980	3,680	920	1,160	90	1,230	10,660	1,300
1979–80 . .	26,180	680	340	2,620	2,930	3,690	910	1,170	90	1,210	11,270	1,270
1980–81 . .	26,830	690	340	2,640	2,960	3,780	920	1,220	90	1,230	11,620	1,340
1981–82 . .	27,380	700	340	2,660	2,990	3,850	940	1,260	90	1,240	11,960	1,360
1982–83 . .	27,930	700	340	2,680	3,000	3,880	940	1,270	90	1,250	12,430	1,370
1983–84 . .	28,460	720	340	2,700	3,040	3,950	950	1,290	90	1,280	12,690	1,400
1984–85 . .	28,640	710	340	2,880	3,040	3,980	960	1,300	90	1,290	12,840	1,410

[1] The breakdown of earned degrees into fields shown in this table differs from the breakdown in 1971 and earlier editions. The present breakdown of earned degrees by field of study is consistent with that shown in *A Taxonomy of Instructional Programs in Higher Education*. To obtain the distribution of degrees by field for the back years, the earned degrees were redistributed as well as possible to conform to the new taxonomy. For a complete listing of the instructional programs included in each field, see appendix A, "Classification of Degrees by Field of Study," pages 139–142.

[2] Preliminary data rounded to tens.

[3] Estimated.

[4] The fall 1971 through 1973 enrollment for advanced-degree data and the 1970–71 through 1973–74 earned-degree data were collected under a new taxonomy of fields of study. As a result of this, in some fields, the recent enrollment for advanced-degree data and earned-degree data are not comparable with past years, making trend line analysis meaningless. Therefore, for some fields, it was assumed that the percentage that doctor's degrees in each field was of all doctor's degrees in 1973–74 would remain constant through 1984–85.

In other fields, where it seems that the most recent data are comparable with past data, data on first-year enrollments for advanced degrees by field of study were used to make estimates and projections. The time lapse used between first-year enrollment for advanced degrees and doctor's degrees varied from 6 to 11 years (see table B-8 in appendix B, for time lapse, by field and sex). It was primarily assumed that the percentage that earned degrees in a particular field was of first-year enrollment for advanced degrees 6 to 11 years earlier (depending on time lapse used) would remain constant at the 1973–74 level. This constant was used to obtain estimates and projections for the beginning of the projected timespan (through 1978–79 for a 6-year time lapse and through 1983–84 for an 11-year time lapse). For projections beyond these years, it was primarily assumed that the percentage that degrees in a particular field was of all doctor's degrees would remain constant at the level of the last year projected on the basis of first-year enrollments for advanced degrees.

For methodological details, see appendix A, table A-2.

[5] Includes home economics, law, military science, theology, and interdisciplinary studies.

NOTE:—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

SOURCES: Degree and enrollment data and estimates are based on (1) U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (a) *Earned Degrees Conferred by Institutions of Higher Education*, 1963–64 through 1973–74; (b) *Enrollment for Advanced Degrees*, fall 1961, 1962, and 1963; (c) *Enrollment for Master's and Higher Degrees, Fall 1964; (d) Enrollment for Master's and Higher Degrees, Fall 1965*; (e) *Students Enrolled for Advanced Degrees*, fall 1966 through 1973; (f) *A Taxonomy of Instructional Programs in Higher Education*; and (2) Engineering Manpower Commission of Engineers Joint Council publication: *Engineering and Technology Graduates, 1973*.

Table 28.—Earned first-professional degrees, by field of study: United States, 1963–64 to 1984–85

Year	Total	Medicine[1]	Dentistry[2]	Other health professions[3]	Law[4]	Theology and other[5]
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1963–64	27,867	7,303	3,180	1,824	10,868	4,692
1964–65	28,755	7,304	3,108	1,794	11,782	4,767
1965–66	30,799	7,673	3,247	1,834	13,481	4,564
1966–67	32,472	7,723	3,341	2,003	15,114	4,291
1967–68	34,787	7,944	3,422	2,153	16,916	4,352
1968–69	36,018	8,025	3,408	2,290	17,436	4,859
1969–70	35,724	8,314	3,718	2,372	15,445	5,875
1970–71	37,946	8,919	3,745	2,496	17,421	5,366
1971–72	43,411	9,253	3,862	2,680	21,764	5,852
1972–73[6]	50,100	10,310	4,050	2,870	27,200	5,670
1973–74[6]	53,680	11,210	4,440	3,230	29,330	5,450
1974–75	54,700	12,730	4,890	3,340	28,290	5,450
				PROJECTED[8]		
1975–76	58,200	13,810	5,400	3,630	29,910	5,450
1976–77	59,400	14,260	5,210	3,770	30,710	5,450
1977–78	60,600	14,710	5,150	3,880	31,410	5,450
1978–79	61,900	15,230	5,490	4,020	31,710	5,450
1979–80	62,700	15,490	5,540	4,130	32,090	5,450
1980–81	63,800	15,990	5,680	4,260	32,420	5,450
1981–82	64,800	16,500	5,740	4,390	32,720	5,450
1982–83	65,900	17,160	5,750	4,530	33,010	5,450
1983–84	66,400	17,540	5,750	4,650	33,010	5,450
1984–85	66,900	17,920	5,750	4,770	33,010	5,450

[1] M.D. degrees only.

[2] D.D.S. or D.M.D. degrees.

[3] Includes degrees in chiropody or podiatry, optometry, osteopathy, and veterinary medicine.

[4] LL.B. or J.D. degrees.

[5] In 1973–74, theological professions made up 92 percent of this category.

[6] Preliminary data rounded to tens.

[7] Estimated.

[8] First-professional degrees by field were projected by means of the following methods: (1) Medicine, dentistry, and other health professions were projected by the Health Resources Administration, Bureau of Health Manpower. (2) It was assumed that "theology and other" first-professional degrees would remain constant at the 1973–74 level of 5,450 degrees. (3) Projected Law degrees are based primarily on the assumption that the percentage that law degrees are of first-year law students 3 years earlier, will follow the 1963–64 to 1973–74 trend through 1984–85 with the restriction that it cannot exceed 85 percent. Data on first-year enrollments in law schools were provided by the American Bar Association.

SOURCES: Degree data and estimates are based on (1) U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: *Earned Degrees Conferred by Institutions of Higher Education*, 1963–64 through 1973–74; and (2) American Bar Association publication: Millard H. Ruud, "That Burgeoning Law School Enrollment Slows," *American Bar Association Journal*, 59: 150:153, February 1973.

CHAPTER IV

Teachers

Martin M. Frankel

Elementary and Secondary Schools

In fall 1974, there were more than 2.6 million professional persons employed in the public and private elementary and secondary day schools. These professionals included principals, supervisors, librarians, guidance and psychological personnel, and classroom teachers. Of the total number, 90 percent were classroom teachers. The numbers of professional persons employed in the regular public school systems were reported to the National Center for Education Statistics by the State departments of education in each of the 50 States and the District of Columbia. The numbers in the regular nonpublic day schools were reported by the individual schools in Office of Education surveys.

Classroom teachers (table 27) and pupil-teacher ratios (table 28)

Classroom teachers are projected separately for public elementary and secondary, and nonpublic elementary and secondary, schools. For each category, projected pupil-teacher ratios are based primarily on the assumption that the 1964 to 1974 trends will continue through 1984, with lower limits applied. These projected pupil-teacher ratios are then divided into the projected enrollment (table 4) to obtain projections of classroom teachers. The number of classroom teachers in public elementary schools increased from 940,000 in 1964 to 1,161,000 in 1974 primarily as a result of decreased pupil-teacher ratios (from 27.9 in 1964 to 22.7 in 1974). Although enrollments in public elementary schools are expected to decrease by more than 2 million students by 1980, corresponding decreases in pupil-teacher ratios are expected to offset the enrollment decreases, resulting in a level of about 1,150,000 teachers through 1980. By 1984 the pupil-teacher ratio is expected to have decreased to 20.1, which, along with increased enrollments, will account for an increase to 1,229,000 classroom teachers in public elementary schools.

The number of classroom teachers in public secondary schools increased from 708,000 in 1964 to 998,000 in 1974 as a result of large enrollment increases (15.2 million in 1964 to 18.7 million in 1974) and significant reductions in the pupil-teacher ratio (from 21.5 in 1964 to 18.7 in 1974). For the next few years, the number of teachers in public secondary schools is expected to increase slightly to over 1 million, as enrollment remains fairly stable and pupil-teacher ratios continue to decrease. However, sharp enrollment drops expected in the late 1970's and early 1980's will be too large to be offset by decreasing pupil-teacher ratios, and, as a result, the number of teachers in public secondary schools for 1984 is expected to be 905,000 (93,000 fewer than in 1974).

The number of classroom teachers in nonpublic elementary schools has remained at about 150,000 during the past 10 years, even though enrollments in these schools have decreased by an estimated 1.5 million. This stability in the number of teachers occurred because the large decreases in enrollment were offset by a sharp reduction in the pupil-teacher ratio—from 34.3 in 1964 to 23.1 in 1974. The bulk of the decrease in enrollment and the corresponding reductions in the pupil-teacher ratios occurred in Catholic elementary schools, which made up 89 percent of nonpublic elementary enrollment in 1964 and 75 percent in 1974. It is expected that both enrollment and pupil-teacher ratios will continue to decrease, resulting in continued relative stability of the number of teachers in nonpublic elementary schools. The number of classroom teachers in nonpublic secondary schools has remained below 80,000 for most of the past 10 years. The number is expected to remain constant at 76,000 through 1984.

Demand for additional classroom teachers (table 29, 30)

The total demand for additional public elementary and secondary school teachers (not employed in the public schools the previous year) includes those needed to allow for enrollment changes, for lowering pupil-teacher ratios, and for replacement of teachers leaving the profession (turnover). During the period fall 1970 to fall 1974, the cumulative demand for additional public school teachers (including returnees to the profession) was estimated at 974,000. It is expected to decrease to 837,000 from 1975 to 1979, then remain at about 845,000 from 1980 to 1984. Therefore, about 1.7 million new teachers or returnees to the profession are expected to be employed by the public schools during the next 10 years, 1975 through 1984.

The projected demand for additional public school teachers is shown in table 29. The number of teachers necessary to take care of enrollment changes and pupil-teacher ratio changes was computed for each year as the difference between the total employed for the current year and the total employed for the previous year. The number for turnover was based on the assumption that 8 percent of the total classroom teachers will leave the profession temporarily or permanently each year.[1]

The total demand for additional nonpublic school teachers was estimated to be 45,000 from 1970 to 1974. It is expected to decrease to 35,000 from 1975 to 1979, then increase to 53,000 from 1980 to 1984.

The projected demand for additional nonpublic elementary and secondary school teachers is shown in table 30. The numbers for taking care of enrollment changes and pupil-teacher ratio changes were computed in the same manner as for public schools; the number for turnover was based on the assumption that 4 percent (one-half the public school rate) of the nonpublic school teachers will leave the profession permanently or temporarily each year. This lower rate (4 percent) was assumed because large numbers of nonpublic school teachers belong to religious orders, where the turnover is presumably small.

Instructional staff (table 31)

Instructional staff in public elementary and secondary schools includes principals, supervisors, librarians, and guidance and psychological personnel, as well as classroom teachers. Instructional staff and classroom teachers are not reported separately for nonpublic schools. Since it is believed that the primary responsibility of most professional personnel employed by the nonpublic schools is classroom teaching, the number of instructional staff shown here is the same as the number of teachers.

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[1] A. Stafford Metz and Howard L. Fleischman, *Teacher Turnover in Public Schools, Fall 1968 to Fall 1969* (Washington, D.C.: U.S. Government Printing Office, 1974).

Projected instructional staff is shown in table 31. Instructional staff in public elementary and secondary schools increased from 1.8 million in 1964 to 2.4 million in 1974 and is expected to remain at about the 2.4 million level through 1984.

The public school instructional staff projection is based on the assumption that instructional staff as a percentage of classroom teachers will remain constant at the 1974 level through 1984. The ratio of total public school instructional staff to classroom teachers increased from 1.10 in 1964 to 1.12 in 1974 and is expected to remain at that level through 1984. These ratios were applied to the public classroom teacher figures shown in table 27 to obtain the projections of public instructional staff. Nonpublic school instructional staff, as previously stated, was assumed to be 100 percent of the classroom teachers shown in table 27.

Institutions of Higher Education

The faculty data for institutions of higher education shown in tables 32 to 34 are on the number of persons by primary positions. Earlier faculty data (1963–64 and earlier) reported the number of positions. Since some positions overlap, with one person filling more than one position, the number of positions is greater than the number of persons. Therefore, the data in tables 32 to 34 are not consistent with faculty data from surveys done prior to 1966.

Instructional staff for resident courses (table 32)

Total full-time and part-time instructional staff for resident courses in all institutions of higher education increased from 367,000 in 1964 to 633,000 in 1974 and is expected to be 695,000 in 1984. These figures include full-time and part-time instructors and above, and full-time and part-time junior instructional staff for instruction in resident courses. (Junior instructional staff includes assistant instructors, teaching fellows, teaching assistants, and laboratory assistants.)

The total of full-time and part-time instructional staff for resident courses was projected separately by control and type of institutions and then summed to obtain the total for all institutions. The projections are based on the assumption that student-staff ratios (number of degree-credit and non-degree-credit students divided by the number of staff) by institutional type and control will remain approximately constant at the 1972 level to 1984. Projections were obtained by dividing projected total enrollment by institutional type and control by the projected student-staff ratio in the corresponding category.

Full-time-equivalent instructional staff for resident courses (table 33)

Full-time-equivalent instructional staff for resident courses in all institutions increased from 274,000 in 1964 to 493,000 in 1974 and is expected to reach 541,000 in 1984. These figures include full-time staff and full-time equivalent of part-time staff for instructor or above and junior instructional staff. In 1974, in all institutions, an estimated 91 percent of the full-time-equivalent instructional staff members with the rank of instructor or above were employed full time, and an estimated 21 percent of the full-time-equivalent junior instructional staff members were employed full time.

Demand for full-time-equivalent instructional staff (table 34)

During the past 5 years, 1970 through 1974, the total demand for additional full-time-equivalent instructional staff was 197,000. The totals are expected to be 215,000 in 1975 through 1979, and 156,000 in 1980 through 1984.

The demand for this additional staff is projected as the total of staff required for increased enrollment and student-staff ratio changes, and for replacement of those who have left the profession either temporarily or permanently. Full-time-equivalent staff required for increased enrollment and student-staff ratio changes is computed as the difference between the total number employed in successive years. Replacement requirements are estimated at 6 percent of the total number of full-time-equivalent staff employed in the previous year.

The assumption of a 6-percent replacement rate is based on unpublished data from a 1963 Office of Education study which showed that about 5 percent of the full-time instructors and above in 4-year institutions intended to leave employment in institutions of higher education during the following year. If we estimate an additional 1 percent for mortality, the annual replacement rate is then 6 percent.

Table 27.--Classroom teachers in regular elementary and secondary day schools, by institutional control and organizational level: United States, fall 1964 to 1984[1]

[In thousands]

Year (fall)	Total public and nonpublic			Public			Nonpublic (estimated)[2]		
	K–12	Elementary	Secondary	K–12	Elementary	Secondary	K–12	Elementary	Secondary
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1964	1,865	1,086	779	1,648	940	708	217	146	71
1965	1,933	1,112	822	1,710	965	746	223	[3]147	[3]76
1966	2,016	1,156	860	1,789	1,006	783	227	150	77
1967	2,081	1,189	892	1,855	1,040	815	226	149	77
1968	2,161	1,223	938	1,936	1,076	860	225	[3]147	[3]78
1969	2,233	1,253	980	2,013	1,108	906	219	145	74
1970	2,288	1,281	1,007	2,055	1,128	927	233	[3]153	[3]80
1971	2,291	1,261	1,030	2,063	[4]1,111	[4]952	228	150	78
1972	2,332	1,291	1,041	2,103	[4]1,140	[4]963	229	151	78
1973	2,369	1,304	1,065	2,138	[4]1,152	[4]986	231	152	79
1974	2,387	1,311	1,076	2,159	[4]1,161	[4]998	228	150	78
					PROJECTED[5]				
1975	2,394	1,303	1,091	2,168	1,153	1,015	226	150	76
1976	2,404	1,301	1,103	2,179	1,152	1,027	225	149	76
1977	2,392	1,295	1,097	2,169	1,148	1,021	223	147	76
1978	2,376	1,288	1,088	2,155	1,143	1,012	221	145	76
1979	2,348	1,283	1,065	2,130	1,141	989	218	142	76
1980	2,325	1,288	1,037	2,105	1,144	961	220	144	76
1981	2,317	1,304	1,013	2,095	1,158	937	222	146	76
1982	2,315	1,321	994	2,091	1,173	918	224	148	76
1983	2,329	1,344	985	2,104	1,195	909	225	149	76
1984	2,360	1,379	981	2,134	1,229	905	226	150	76

[1] Includes full-time and the full-time equivalent of part-time classroom teachers (in 1974, 99 percent of teachers in the public schools were full time). Prior to 1969, the data include some part-time teachers who were not converted to full-time equivalents. Does not include teachers in independent nursery and kindergarten schools, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, federally operated schools on Federal installations, and other schools not in the regular school system.

[2] Instructional staff and classroom teachers are not reported seperately. All data unless otherwise indicated are estimated. Estimates through 1964 revised spring 1968 on basis of 1965 Office of Education survey.

[3] Reported data from Office of Education surveys.

[4] Estimated on the basis of data from the National Education Association. See appendix A, "Estimated Methods," sec. 4.

[5] The projection of teachers in both public and nonpublic schools depends upon the projection of enrollments (table 4) and upon the projection of pupil-teacher ratios (table 28).

For further methodological details, see appendix A, table A-3.

NOTE.–Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

SOURCE: Classroom teacher data and estimates are based on (1) U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (a) *Statistics of Public Schools*, fall 1964 through 1974, (b) *Statistics of Public and Nonpublic Elementary and Secondary Day Schools, 1968–69*, (d) *Statistics of Nonpublic Elementary and Secondary Schools, 1965–66*, (e) *Nonpublic School Enrollment in Grades 9–12, Fall 1964, and Graduates, 1963–64*; and (2) National Education Association publications: Research Reports, *Estimation of School Statistics*, 1972–73, 1973–74 and 1974–75.

Table 28.—Pupil-teacher ratios in regular elementary and secondary day schools, by institutional control and organizational level: United States, fall 1964 to 1984[1]

Year (fall)	Public		Nonpublic (estimated)[2]	
	Elementary	Secondary	Elementary	Secondary
(1)	(2)	(3)	(4)	(5)
1964	27.9	21.5	34.3	18.3
1965	27.6	20.8	[3]33.5	[3]18.1
1966	27.0	20.4	32.3	18.1
1967	26.3	20.3	31.1	18.1
1968	25.4	20.5	[3]29.8	[3]17.3
1969	24.8	20.0	27.9	17.1
1970	24.3	19.8	[3]26.5	[3]16.4
1971	[4]24.9	[4]19.3	25.5	16.3
1972	[4]24.0	[4]19.1	24.3	15.9
1973	[4]22.9	[4]19.3	23.4	15.6
1974	[4]22.7	[4]18.7	23.1	15.7
	PROJECTED[5]			
1975	22.4	18.6	22.6	15.7
1976	22.1	18.4	22.2	15.7
1977	21.8	18.3	21.8	15.7
1978	21.5	18.1	21.4	15.7
1979	21.2	18.0	21.1	15.7
1980	21.0	17.9	20.8	15.7
1981	20.7	17.8	20.6	15.7
1982	20.5	17.7	20.3	15.7
1983	20.3	17.6	20.1	15.7
1984	20.1	17.5	20.0	15.7

[1] Includes full-time and the full-time equivalent of part-time classroom teachers (in 1974, 99 percent of teachers in the public schools were full time). Prior to 1969 the data include some part-time teachers who were not converted to full-time equivalents. Does not include teachers in independent nurseries and kindergarten schools, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, federally operated schools on Federal installations, and other schools not in the regular school system.

[2] Instructional staff and classroom teachers are not reported seperately. All data unless otherwise indicated are estimated. Estimates for 1964 revised spring 1968 on basis of 1965 Office of Education survey.

[3] Reported data from Office of Education surveys.

[4] Estimated on the basis of data from the National Educational Association. See appendix A, "Estimation Methods," sec. 4.

[5] The projections of pupil-teacher ratios are based on the assumption that the ratio of enrollment to the number of teachers will follow the 1964—1974 trend to 1984.

Decreases in the pupil-teacher ratios in public elementary and secondary schools due to the Elementary and Secondary Education Act of 1965 are included in the trend projections.

For further methodological details, see appendix A, table A-3.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

SOURCES: Classroom teacher data and estimates are based on (1) U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (a) *Statistics of Public Schools*, fall 1964 through 1974, (b) *Statistics of Nonpublic Elementary and Secondary Schools, 1970—71*, (c) *Statistics of Public and Nonpublic Elementary and Secondary Day Schools, 1968—69*, (d) *Statistics of Nonpublic Elementary and Secondary Schools, 1965—66*; and (2) National Education Association publications: Research Reports, *Estimates of School Statistics*, 1972—73, 1973—74, and 1974—75.

Table 29.—Estimated demand for classroom teachers in regular public elementary and secondary day schools: United States, fall 1969 to 1984[1]

[In thousands]

Year (fall) (1)	Total teacher demand (2)	Demand for additional certificated teachers[2]			
		Total (3)	For enrollment changes (4)	For pupil-teacher ratio changes (5)	For teacher turnover (6)
1969	2,013	...	...	...	...
1970	2,055	202	15	26	161
1971	2,063	172	9	-1	164
1972	2,103	205	-12	52	165
1973	2,138	203	-7	42	168
1974	2,159	192	-19	40	171
1970–74	...	974	-14	159	829
			PROJECTED[3]		
1975	2,168	182	-11	20	173
1976	2,179	184	-16	27	173
1977	2,169	164	-30	20	174
1978	2,155	160	-40	26	174
1979	2,130	147	-46	21	172
1975–79	...	837	-143	114	866
1980	2,105	145	-41	16	170
1981	2,095	158	-31	21	168
1982	2,091	164	-20	16	168
1983	2,104	180	-4	17	167
1984	2,134	198	13	17	168
1980–84	...	845	-83	87	841

[1] Includes full-time and the full-time equivalent of part-time classroom teachers (in 1974, 99 percent of teachers in the public schools were full-time). The 1968 data include some part-time teachers who were not converted to full-time equivalents. Does not include teachers in independent nurseries and kindergartens, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, federally operated schools on Federal installations, and other schools not in the regular school system.

[2] The estimates and projections of demand for additional certificated teachers were based on the following assumptions: (1) For changes in pupil-teacher ratios, the number of additional teachers needed is the total teacher demand in a given year less the estimated total teacher demand in the same year had the pupil-teacher ratio in the previous year remained constant. (2) For enrollment changes, the number of additional teachers needed is the total needed for both enrollment changes and pupil-teacher ratio changes less the number needed for pupil-teacher ratio changes alone; the number of additional teachers needed for both enrollment changes and pupil-teacher ratio changes is the total teacher demand in a given year less the total teacher demand in the previous years. (3) For teacher turnover, the number of additional teachers needed to replace those leaving the profession either temporarily or permanently will be 8 percent of the total employed in the previous year; the 8-percent separation rate is based on the Office of Education study *Teacher Turnover in Public Schools, Fall 1968 to Fall 1969.*

The projected demand makes no allowance for replacement of teachers who hold substandard certificates (less than 2 percent of employed teachers in 1972).

[3] The projection of classroom teachers in public schools by organizational level and institutional control is based on the assumption that the pupil-teacher ratio will follow the 1964–74 trend to 1984.

For further methodological details, see appendix A, table A-3.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publication: (1) *Statistics of Public Schools*, fall 1969 through 1974.

Table 30.—Estimated demand for classroom teachers in regular nonpublic elementary and secondary day schools: United States, fall 1969 to 1984

[In thousands]

Year (fall)	Total teacher demand	Demand for additional certificated teachers[1]			
		Total	For enrollment changes	For pupil-teacher ratio changes	For teacher turnover
(1)	(2)	(3)	(4)	(5)	(6)
1969	219	...	...	...	...
1970	233	13	-7	11	9
1971	228	4	-12	7	9
1972	229	10	-8	9	9
1973	231	11	-5	7	9
1974	228	7	-3	1	9
1970–74 ...	...	45	-35	35	45
	PROJECTED				
1975	226	7	-4	2	9
1976	225	8	-4	3	9
1977	223	7	-5	3	9
1978	221	7	-4	2	9
1979	218	6	-5	2	9
1975–79 ...	...	35	-22	12	45
1980	220	11	0	2	9
1981	222	11	0	2	9
1982	224	11	0	2	9
1983	225	10	0	1	9
1984	226	10	0	1	9
1980–84 ...	...	53	0	8	45

[1] The estimates and projections of demand for additional certificated teachers were based on the following assumptions: (1) For changes in pupil-teacher ratios, the number of additional teachers needed is the total teacher demand in a given year less the estimated total teacher demand in the same year had the pupil-teacher ratio in the previous year remained constant. (2) For enrollment changes, the number of additional teachers needed is the total needed for both enrollment changes and pupil-teacher ratio changes less the number needed for pupil-teacher ratio changes alone; the number of additional teachers needed for both enrollment changes and pupil-teacher ratio changes is the total teacher demand in a given year less the total teacher demand in the previous year. (3) For teacher turnover, the number of additional teachers needed to replace those leaving the nonpublic schools either temporarily or permanently is assumed to be 4 percent of the total employed in the previous year.

For further methodological details, see appendix A, table A-3.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Statistics of Nonpublic Elementary and Secondary Schools, 1970–71*, and (2) *Statistics of Public and Nonpublic Elementary and Secondary Day Schools, 1968–69.*

Table 31.—Estimated instructional staff in regular elementary and secondary day schools, by institutional control: United States, fall 1964 to 1984[1]

[In thousands]

Year (fall) (1)	Total (2)	Public schools (3)	Nonpublic schools[2] (4)
1964	2,030	1,813	217
1965	2,108	1,885	223
1966	2,211	1,984	227
1967	2,297	2,071	226
1968	2,389	2,164	225
1969	2,472	2,253	219
1970	2,529	2,296	233
1971	2,516	2,288	228
1972	2,568	2,339	229
1973	2,610	2,379	231
1974	2,644	2,416	228
		PROJECTED[3]	
1975	2,652	2,426	226
1976	2,663	2,438	225
1977	2,650	2,427	223
1978	2,632	2,411	221
1979	2,601	2,383	218
1980	2,575	2,355	220
1981	2,566	2,344	222
1982	2,564	2,340	224
1983	2,579	2,354	225
1984	2,614	2,388	226

[1] Instructional staff includes principals, supervisors, librarians, and guidance and psychological personnel, as well as full-time and the full-time equivalent of part-time classroom teachers. (In 1974, 99 percent of classroom teachers were full time.) Prior to 1969, the data include some part-time teachers who were not converted to full-time equivalents. Does not include instructional staff in independent nursery and kindergarten schools, residential schools for exceptional children, subcollegiate departments of higher education, Federal schools for Indians, federally operated schools on Federal installations, and other schools not in the regular school system.

[2] Instructional staff and classroom teachers are not reported separately. All data are wholly or partially estimated. Estimates through 1964 revised spring 1968 on basis of 1965 Office of Education survey.

[3] Projections of instructional staff in public schools are based on the assumption that the ratio of instructional staff to classroom teachers will remain constant at the 1974 level through 1984.

For further methodological details, see appendix A, table A-3.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

SOURCES: Instructional staff data and estimates are based on U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Statistics of Public Schools*, fall 1971 through 1974, (2) *Statistics of State School Systems*, biennial circulars 1963–64 through 1969–70, (3) *Statistics of Nonpublic Elementary and Secondary Schools, 1970–71*, (4) *Statistics of Public and Nonpublic Elementary and Secondary Day Schools, 1968–69*, and (5) *Statistics of Nonpublic Elementary and Secondary Schools, 1965–66.*

Table 32.—Estimated full-time and part-time instructional staff for instruction in resident courses in all institutions of higher education, by professional rank: United States, fall 1964 to 1984[1]

[In thousands]

Year (fall) (1)	Total (2)	Instructor or above			Junior Instructor		
		Total (3)	Full-time (4)	Part-time (5)	Total (6)	Full-time (7)	Part-time (8)
1964[2]	367	307	212	95	60	12	48
1965[2]	412	339	248	91	73	15	58
1966	445	361	278	83	84	17	67
1967	484	389	299	90	95	14	81
1968	523	427	331	95	96	16	80
1969[2]	546	448	349	99	98	15	83
1970	574	472	368	104	102	15	87
1971[2]	580	483	373	110	97	12	85
1972	592	499	380	119	93	9	84
1973	600	508	389	119	92	8	84
1974	633	536	411	125	97	9	88
	PROJECTED[3]						
1975	654	554	424	130	100	9	91
1976	673	570	436	134	103	9	94
1977	689	584	447	137	105	10	95
1978	701	594	455	139	107	10	97
1979	710	601	460	141	109	10	99
1980	716	606	464	142	110	10	100
1981	718	608	466	142	110	10	100
1982	719	609	466	143	110	10	100
1983	709	600	459	141	109	10	99
1984	695	589	451	138	106	10	96

[1] For method of estimating instructional staff, see appendix A, "Estimation Methods," secs. 5a—5c.

[2] Interpolated.

[3] The projection of total full-time and part-time instructional staff for resident courses was computed separately by control and type of institutions and then summed for all institutions. For each category, the projection is based primarily on the assumption that the ratio of total enrollment to total instructional staff for resident courses will remain constant at the 1972 level through 1984.

The projections of instructional staff for full-time instructor or above, part-time instructor or above, full-time junior instructor, and part-time junior instructor are based on the percentage that each type of position was of total full-time and part-time instructional staff for resident courses in 1972. These percentages were 65.0, 19.8, 1.4, and 13.8, respectively, and are assumed to remain at the 1972 level through 1984.

For methodological details, see appendix A, table A-3.

NOTE.—Because of rounding, details may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Numbers and Characteristics of Employees in Institutions of Higher Education*, fall 1966 and 1967; (2) *Teaching and Research Staff by Academic Fields, Fall 1968*; (3) unpublished data from survey on employees in institutions of higher education, fall 1970; and (4) preliminary data from *Numbers of Employees in Institutions of Higher Education, Fall 1972.*

Table 33.—Estimated full-time-equivalent instructional staff for resident courses in all institutions of higher education, by professional rank: United States, fall 1964 to 1984[1]

[In thousands]

Year (fall)	Estimated total full-time equivalent	Instructor or above			Junior instructor		
		Total	Full time	Full-time equivalent of part time	Total	Full time	Full-time equivalent of part time
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1964[2]	274	243	212	31	31	12	19
1965[2]	317	279	248	31	38	15	23
1966	351	307	278	29	44	17	27
1967	378	331	299	32	47	14	33
1968	413	364	331	33	49	16	33
1969[2]	431	382	349	33	49	15	34
1970	452	401	368	33	51	15	36
1971[2]	453	407	373	34	46	12	34
1972	457	416	380	36	41	9	32
1973	467	426	389	37	41	8	33
1974	493	450	411	39	43	9	34
				PROJECTED[3]			
1975	508	464	424	40	44	9	35
1976	523	478	436	42	45	9	36
1977	536	489	447	42	47	10	37
1978	546	498	455	43	48	10	38
1979	552	504	460	44	48	10	38
1980	557	508	464	44	49	10	39
1981	559	510	466	44	49	10	39
1982	559	510	466	44	49	10	39
1983	551	503	459	44	48	10	38
1984	541	494	451	43	47	10	37

[1] Estimated. See appendix A, "Estimation Methods," secs. 5a–5d.

[2] Interpolated.

[3] The projection of full-time equivalent of part-time instructional staff for resident courses is based on the following assumptions: (1) Full-time equivalent of part-time instructor or above will remain constant to 1984 at the 1972 level of 31.0 percent. (2) Full-time equivalent of junior instructional staff will remain constant through 1984 at the 1972 level of 38.8 percent.

For methodological details, see appendix A, table A-3.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Numbers and Characteristics of Employees in Institutions of Higher Education*, fall 1966 and 1967, (2) *Teaching and Research Staff by Academic Fields, Fall 1968*, (3) unpublished data from survey on employees in institutions of higher education, fall 1970, and (4) preliminary data from *Numbers of Employees in Institutions of Higher Education, Fall 1972.*

Table 34.—Estimated demand for full-time-equivalent instructional staff in institutions of higher education: United States, fall 1969 to 1984

[In thousands]

Year (fall)	Full-time equivalent instructional staff[1]	Additional full-time-equivalent instructional staff needed		
		Total	For increased enrollment and changes of student-staff ratio	For replacement
(1)	(2)	(3)	(4)	(5)
1969	431	...	...	...
1970	452	47	21	26
1971	453	28	1	27
1972	457	31	4	27
1973	467	37	10	27
1974	493	54	26	28
1970–1974	...	197	62	135
	PROJECTED[2]			
1975	508	45	15	30
1976	523	45	15	30
1977	536	44	13	31
1978	546	42	10	32
1979	552	39	6	33
1975–1979	...	215	59	156
1980	557	38	5	33
1981	559	35	2	33
1982	559	34	0	34
1983	551	26	-8	34
1984	541	23	-10	33
1980–1984	...	156	-11	167

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[1] The estimates and projections of additional full-time-equivalent professional staff for increased enrollment and for reduction of the student-staff ratio were computed as the difference between the total full-time-equivalent professional staff employed in 2 successive years.

The projection of additional full-time-equivalent professional staff for replacement of those leaving the profession, temporarily or permanently, was estimated at 6 percent of the total full-time-equivalent professional staff employed in the previous year.

For methodological details, see appendix A, table A-3.

[2] For method of estimating and projecting full-time-equivalent instructional staff, see table 32, footnote 3, and table 33, footnote 3.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Numbers and Characteristics of Employees in Institutions of Higher Education*, fall 1966 and 1967, (2) *Teaching and Research Staff by Academic Fields, Fall 1968*, (3) unpublished data from survey on employees in institutions of higher education, fall 1970, and (4) preliminary data from *Numbers of Employees in Institutions of Higher Education, Fall 1972*.

CHAPTER V

Expenditures of Educational Institutions

Forrest W. Harrison and C. George Lind

Explanations and Definitions

The main tables in this chapter pertain only to expenditures of regular public and nonpublic elementary and secondary schools and institutions of higher education in the 50 States and the District of Columbia. Data on "other" and "special" institutions are not included, except for the references to "other" schools in the discussion on page 72 and the table on pages 73 through 78.

"Other" institutions include elementary and secondary residential schools for exceptional children (public and nonpublic), Federal schools for Indians (public), and federally operated elementary and secondary schools on military posts (public). In 1974–75, estimated expenditures were about $200 million for public and $100 million for nonpublic "other" schools. Almost all "other" schools, including the nonpublic, were nonprofitmaking institutions.

"Special" institutions include schools such as trade schools or business colleges not in the regular school or college framework. Expenditure data are not available for "special" schools, but it is estimated they spend $1.3 billion per year. The U.S. Bureau of the Census estimates that approximately 1.3 million persons aged 5 through 34 years were enrolled in "special" schools in October, 1974.[1] If an average expenditure per student of about $1,200 is assumed, the total expenditures for these schools would be about $1.6 billion. Almost all "special" schools are nonpublic, profitmaking institutions.

Regular institutions include public and most nonprofitmaking, nonpublic elementary and secondary schools (kindergarten through grade 12) plus the institutions of higher education offering degree-credit courses, and a small number of technical and professional schools. Most of these schools and colleges are oriented toward regular academic programs, but some are primarily technical training institutions or offer both academic and vocational courses.

Total expenditures include all funds expended for capital outlay, current expenditures, and interest. They exclude repayment of debt and transfers of funds that would result in duplication.

Capital outlay includes expenditures which result in additions to plant assets; this includes expenditures by public school building authorities but excludes lease or rental payments made to these agencies. Borrowed money is included; a large percentage of the funds expended for capital outlay was received from loans. In 1971–72, an estimated 84 percent of the capital outlay for public elementary and secondary schools was for land and buildings; the remaining 16 percent, for new buses and other equipment. About 79 percent of the capital outlay by institutions of higher education during 1972–73 was for land and buildings; the remaining 21 percent was for equipment.

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[1] U.S. Department of Commerce, Bureau of the Census, *Current Population Reports, School Enrollment: October, 1974*, Series P–20, No. 286, 1975.

Current expenditures include any expenditures except those for repayment of debt and capital outlay. Interest is generally excluded from the current expenditures shown here because it is treated separately. The largest current expense item is salaries of instructional staff, accounting for about 60 percent of current expenditures. The remaining 40 percent goes for transportation, maintenance, etc.

Interest includes all funds expended for the use of money. Most of the interest shown here was expended on account of long-term debt that was incurred for constructing buildings.

Expenditures by Source of Funds

Regular and "Other" Schools

Although no attempt was made to project amounts of funds from the various sources to be expended by educational institutions, estimates are shown by source for the past years, 1965–66 through 1972–73. To do this, estimates for "other" schools were added to the total expenditures shown in table 36 for the appropriate years. The resulting total expenditures for regular and "other" schools were then broken down by source of funds by first adjusting receipts to equate them with expenditures and then assuming continuation of the 1965–66 through 1972–73 trend in the amount of receipts from each source. Receipts and expenditures were equated mainly by including loans and excluding the receipts used for repayment of loans.

Total expenditures are defined as the expenditure of all money from both loans and grants, and exclude only the funds used for reducing debt and transfers that result in duplication. Expenditures from Federal, State, and local sources are defined as institutional expenditures of all grants (but not loans) of funds received from these sources. Expenditures from all other sources include all funds received by the institutions that were not received as grants from Federal, State, and local governments. Loans to institutions of higher education from any source are included under "all other." (It is estimated that in 1975–76, $33 million in Federal loans to institutions of higher education was included in the "all other" category shown here.)

Since the foregoing definitions are designed to show sources of funds through the eyes of educational institutions, the Federal figures shown in the following table are different from those shown in appendix B, table B-11, on Federal funds for education. The three main reasons are as follows:

1. Different items are included. For example, the table on Federal funds in appendix B shows grants and loans to individuals, which would appear in institutional accounts here as receipts from tuition or auxiliary services; or the money may be spent for board and room outside the institution and not be a receipt of the institution from any source.
2. The same items may be handled differently. For example, the table on Federal funds shows only basic research for institutions of higher education; the institutions include some applied research grants from the Federal Government.
3. The table on Federal funds generally shows obligated funds; the institutional figures show expenditures.

Total Expenditures

Regular Institutions (table 35)

Total annual expenditures of regular educational institutions (in 1974–75 dollars) increased from $68.6 billion in 1964–65 to $108.4 billion in 1974–75 and are expected to be $122.3 billion in 1984–85. The expenditure increases are caused chiefly by the increasing costs of the many items, such as school facilities and salaries of teachers, that are necessary for

Estimated expenditures by regular and "other" educational institutions, by source of funds: United States, 1965–66 to 1975–76[1]

Source of funds, by control and level (1)	1965–66 (2)	1967–68 (3)	1969–70 (4)	1971–72 (5)	1972–73 (6)	1973–74 (7)	1974–75 (8)	1975–76 (9)
	AMOUNT, in billions of current dollars							
All levels:								
Total, public and nonpublic	$45.2	$57.2	$70.2	$83.0	$89.2	$98.3	$108.7	$120.0
Federal	5.0	6.8	7.4	9.4	9.8	10.1	11.6	11.8
State	13.1	16.8	22.7	26.3	29.4	32.8	36.5	40.9
Local	15.1	18.6	22.2	26.4	28.1	31.2	33.3	37.2
All other	12.0	15.0	17.9	20.9	21.9	24.2	27.3	30.1
Total, public	35.3	45.5	56.8	67.4	72.8	80.3	88.6	98.0
Federal	3.6	5.1	5.7	7.5	7.8	8.0	9.3	9.4
State	13.0	16.7	22.6	26.1	29.2	32.5	36.2	40.5
Local	15.1	18.6	22.1	26.3	28.0	31.1	33.2	37.1
All other	3.6	5.1	6.4	7.5	7.8	8.7	9.9	11.0
Total, nonpublic	9.9	11.7	13.4	15.6	16.4	18.0	20.1	22.0
Federal	1.4	1.7	1.7	1.9	2.0	2.1	2.3	2.4
State	.1	.1	.1	.2	.2	.3	.3	.4
Local	(2)	(2)	.1	.1	.1	.1	.1	.1
All other	8.4	9.9	11.5	13.4	14.1	15.5	17.4	19.1

See footnotes at end of table.

Estimated expenditures by regular and "other" educational institutions, by source of funds: United States, 1965–66 to 1975–76[1] –Continued

Source of funds, by control and level (1)	1965–66 (2)	1967–68 (3)	1969–70 (4)	1971–72 (5)	1972–73 (6)	1973–74 (7)	1974–75 (8)	1975–76 (9)
	AMOUNT, in billions of current dollars							
Elementary and secondary schools:								
Total, public and nonpublic	$30.0	$37.3	$45.5	$53.8	$57.8	$63.3	$68.5	$75.1
Federal	2.1	3.0	3.3	4.6	4.7	4.6	5.5	5.3
State	9.6	12.1	16.3	18.4	20.5	22.7	24.7	27.4
Local	14.7	18.0	21.3	25.2	26.8	29.7	31.5	35.1
All other	3.6	4.2	4.6	5.6	5.8	6.3	6.8	7.3
Total, public[3]	26.5	33.2	41.0	48.3	52.1	57.1	61.8	67.9
Federal	2.1	3.0	3.3	4.6	4.7	4.6	5.5	5.3
State	9.6	12.1	16.3	18.4	20.5	22.7	24.7	27.4
Local	14.7	18.0	21.3	25.2	26.8	29.7	31.5	35.1
All other	.1	.1	.1	.1	.1	.1	.1	.1
Total, nonpublic	3.5	4.1	4.5	5.5	5.7	6.2	6.7	7.2
Federal	...	...	...	...	...	...	...	...
State	...	...	...	...	...	...	...	...
Local	...	...	...	...	...	...	...	...
All other	3.5	4.1	4.5	5.5	5.7	6.2	6.7	7.2

Institutions of higher education:								
Total, public and nonpublic	$15.2	$19.9	$24.7	$29.2	$31.4	$36.0	$40.2	$44.9
Federal	2.8	3.8	4.1	4.8	5.1	5.5	6.1	6.5
State	3.5	4.7	6.4	7.9	8.9	10.1	11.8	13.5
Local	.4	.6	.9	1.2	1.3	1.5	1.8	2.1
All other	8.4	10.8	13.3	15.3	16.1	17.9	20.5	22.8
Total, public[3]	8.8	12.3	15.8	19.1	20.7	23.2	26.8	30.1
Federal	1.5	2.1	2.4	2.9	3.1	3.4	3.8	4.1
State	3.4	4.6	6.3	7.7	8.7	9.8	11.5	13.1
Local	.4	.6	.8	1.1	1.2	1.4	1.7	2.0
All other	3.5	5.0	6.3	7.4	7.7	8.6	9.8	10.9
Total, nonpublic[3]	6.4	7.6	8.9	10.1	10.7	11.8	13.4	14.8
Federal	1.4	1.7	1.7	1.9	2.0	2.1	2.3	2.4
State	.1	.1	.1	.2	.2	.3	.3	.4
Local	(2)	(2)	.1	.1	.1	.1	.1	.1
All other	4.9	5.8	7.0	7.9	8.4	9.2	10.7	11.9

Estimated expenditures by regular and "other" educational institutions, by source of funds: United States, 1965–66 to 1975–76[1] – Continued

Source of funds, by control and level (1)	1965–66 (2)	1967–68 (3)	1969–70 (4)	1971–72 (5)	1972–73 (6)	1973–74 (7)	1974–75 (8)	1975–76 (9)
	PERCENT							
All levels:								
Total, public and nonpublic	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal	11.1	11.9	10.6	11.3	11.0	10.3	10.7	9.8
State	29.0	29.4	32.3	31.7	33.0	33.4	33.6	34.1
Local	33.4	32.5	31.6	31.8	31.5	31.7	30.6	31.0
All other	26.5	26.2	26.5	25.2	24.5	24.6	25.1	25.1
Total, public	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal	10.2	11.2	10.0	11.1	10.7	10.0	10.5	9.6
State	36.8	36.7	39.8	38.8	40.1	40.5	40.8	41.3
Local	42.8	40.9	38.9	39.0	38.5	38.7	37.5	37.9
All other	10.2	11.2	11.3	11.1	10.7	10.8	11.2	11.2
Total, nonpublic	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal	14.1	14.5	12.7	12.2	12.2	11.7	11.4	10.9
State	1.0	.9	.7	1.3	1.2	1.7	1.5	1.8
Local	(4)	(4)	.7	.6	.6	.5	.5	.5
All other	84.9	84.6	85.9	85.9	86.0	86.1	86.6	86.8

Elementary and secondary schools:								
Total, public and nonpublic	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal	7.0	8.0	7.3	8.6	8.1	7.3	8.0	7.1
State	32.0	32.4	35.8	34.2	35.5	35.8	36.1	36.5
Local	49.0	48.3	46.8	46.8	46.4	46.9	46.0	46.7
All other	12.0	11.3	10.1	10.4	10.0	10.0	9.9	9.7
Total, public	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal	8.0	9.0	8.1	9.5	9.0	8.1	8.9	7.8
State	36.3	36.5	39.8	38.1	39.4	39.7	40.0	40.3
Local	55.3	54.2	51.9	52.2	51.4	52.0	50.9	51.7
All other	.4	.3	.2	.2	.2	.2	.2	.2
Total, nonpublic	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal	...	...	...	...	...	...	...	...
State	...	...	...	...	...	...	...	...
Local	...	...	...	...	...	...	...	...
All other	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Estimated expenditures by regular and "other" educational institutions, by source of funds: United States, 1965–66 to 1975–76[1] – Continued

Source of funds, by control and level (1)	1965–66 (2)	1967–68 (3)	1969–70 (4)	1971–72 (5)	1972–73 (6)	1973–74 (7)	1974–75 (8)	1975–76 (9)
	PERCENT							
Institutions of higher education:								
Total, public and nonpublic	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal	19.1	19.1	16.6	16.4	16.3	15.7	15.2	14.5
State	23.0	23.6	25.9	27.1	28.3	28.9	29.3	30.0
Local	2.6	3.0	3.6	4.1	4.1	4.3	4.5	4.7
All other	55.3	54.3	53.9	52.4	51.3	51.1	51.0	50.8
Total, public	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal	17.6	17.1	15.0	15.0	15.2	14.7	14.2	13.7
State	38.4	37.7	40.0	40.8	41.8	42.4	43.0	43.5
Local	4.1	4.5	5.1	5.5	5.8	6.0	6.3	6.5
All other	39.9	40.7	39.9	38.7	37.2	36.9	36.5	36.3
Total, nonpublic	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal	22.1	21.8	18.8	18.6	18.9	18.1	17.3	16.5
State	1.5	1.2	1.6	2.0	2.2	2.3	2.4	2.5
Local	.1	.3	.7	.5	.6	.7	.8	.8
All other	76.3	76.7	78.9	78.9	78.3	78.9	79.5	80.2

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[1] In addition to regular schools (shown in table 36), these figures include "other" elementary and secondary schools such as residential schools for exceptional children, Federal schools for Indians, and federally operated elementary and secondary schools on military posts. The annual expenditures of "other" elementary and secondary schools were estimated as follows: Public, $200 million annually, 1965–66 to 1975–76; nonpublic, $100 million annually, 1965–66 to 1975–76.

[2] Less than $50 million.

[3] Total expenditures distributed according to the trend of receipts shown in appendix B, table B-8. See text for more complete explanation.

[4] Less than 0.05 percent.

NOTE:—Data are for 50 States and the District of Columbia for all years.

SOURCES: Data for the table above were based on (1) statistics shown in U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (a) *Statistics of State School Systems*, biennially, 1965–66 through 1971–72, (b) *Statistics of Public Schools*, annually, fall 1972 through fall 1974, (c) *Financial Statistics of Higher Education*, annually, 1965–66 through 1972–73; and (2) unpublished data in the National Center for Education Statistics and the National Education Association.

providing education. The projected total expenditures are shown in table 35. They are based mainly on the assumption that the 1964–65 to 1974–75 trend will continue through 1984–85.

Regular Public Elementary and Secondary Schools (tables 35, 37)

Current Expenditures

Annual current expenditures for public elementary and secondary schools (in 1974–75 dollars) increased from $31.8 billion in 1964–65 to $54.3 billion in 1974–75, an increase of 71 percent. They are expected to increase 5 percent to $56.9 billion by 1984–85.

Increased enrollment, together with increased expenditures per pupil, have accounted for the increase in current expenditures. Expenditures have been increasing and are expected to continue to increase, but at a much slower rate in constant dollars for practically all of the major items included in current expenditures, such as administration, instruction, operation and maintenance of plant, fixed charges, and other school services and programs. Annual current expenditures per pupil (in 1974–75 dollars) increased from $802 in 1964–65 to $1,255 in 1974–75 and are expected to increase to $1,464 by 1984–85.

Projected current expenditures for public elementary and secondary schools are shown in table 37. They were projected as follows:

1. Current expenditures per pupil in average daily attendance (ADA) for the base years 1964–65 through 1974–75 were converted to 1974–75 dollars on the basis of the Consumer Price Index prepared by the Bureau of Labor Statistics, U.S. Department of Labor. Monthly index numbers were averaged on a July–June basis to correspond to the school years.

2. The current expenditures per pupil for the years 1964–65 through 1974–75 were used in deriving a formula (by least squares) for projecting trend figures for 1975–76 through 1984–85. This formula was $Y' = \$1500/[1+e^{(0.047-0.179t)}]$; (t=time in years, t=1 in 1964–65).

3. Average daily attendance was calculated for 1975–76 through 1984–85 by assuming that the ratio of average daily attendance to projected fall enrollment in kindergarten through grade 12 will remain constant at 0.92 through 1984–85, based on the projection of the trend of the past 11 years.

4. Total current expenditures allocated to public elementary and secondary school pupil costs (1974–75 dollars) were projected to 1984–85 by multiplying the current expenditures per pupil, as projected in step 2, by the corresponding average daily attendance projected in step 3. These figures exclude expenditures for summer schools, adult education, and community colleges operated by school districts.

5. Total current expenditures for all programs operated by school districts–including summer schools, adult education, and community colleges–were projected to 1984–85 by assuming that current expenditures for all programs will remain constant at the rate of 104 percent of current expenditures for programs allocated for public elementary and secondary school pupil costs.

6. Current expenditures per pupil allocated to public elementary and secondary pupil costs were projected to 1984–85 by assuming that the trend of 1964–65 through 1974–75 will continue through 1984–85.

7. Total current expenditures allocated to pupil costs were projected by multiplying the current expenditures per pupil, as projected in step 6, by the corresponding average daily attendance projected in step 3.

8. Total current expenditures for all programs operated by school districts were projected by multiplying the figures in step 7 by 104 percent.

Salaries of Instructional Staff (tables 38, 31)

A large part of current expenditures for public elementary and secondary schools is for salaries of instructional staff (amounting to 58 percent in 1971–72). Total expenditures for these salaries (in 1974–75 dollars) increased from $19.2 billion in 1964–65 to $29.2 billion in 1974–75 and are expected to be $31.8 billion in 1984–85. These increases are due to changes in the numbers of instructional staff and to higher average annual salaries.

The average annual salary of instructional staff (in 1974–75 dollars) increased from $10,606 in 1964–65 to an estimated $12,070 in 1974–75 and is expected to be $13,300 in 1984–85. During the past 10 years, 1964–1975, the average annual salary has been increasing about $146 per year in 1974–75 dollars. The projected figure for 1984–85 ($13,300) is based on the assumption that the 1964–65 to 1974–75 trend will continue through 1984–85.

Projected total and average annual salaries of instructional staff in public elementary and secondary schools are shown in table 38. The procedure was as follows:

The average annual salary (Y) was projected as a continuation of the 1964–65 to 1974–75 trend: $Y' = \$13{,}500/[1+e^{-(1.399+0.126t)}]$; (t = time in years, t = 1 in 1964–65).

Total expenditures for salaries of instructional staff were then computed as the product of the average annual salary and the total number of instructional staff. (The total number of instructional staff was taken from table 31.)

Classroom Construction and Capital Outlay (table 39)

Capital outlay (in 1974–75 dollars) by regular public elementary and secondary schools, including the expenditures of State and local school building authorities, was $37.0 billion for the 5-year period 1965–66 through 1969–70, and $28.1 billion for the following 5-year period, 1970–71 through 1974–75. It is expected to be $22.8 billion for 1975–76 through 1979–80 and $20.0 billion for 1980–81 through 1984–85.

Projected expenditures for capital outlay are shown in table 39. They are not projections of need but are simply projections of the capital outlay expected in the light of the 1964–65 through 1974–75 trend and other factors.

The basic data and projections are shown in table 39.

It should be noted that not all the capital outlay shown here represents construction. It was estimated that, in 1971–72, 16 percent of capital outlay was for equipment and 84 percent for land and buildings.

A sharp decrease is expected in the number of rooms to be completed on account of enrollment increases; however, school buildings will continue to be constructed for other reasons, including: (1) Replacements (abandonments), (2) migration factors (including school district reorganization), and (3) reduction of crowded and unsatisfactory rooms.

Interest Expenditures (table 40)

Annual expenditures (in 1974–75 dollars) for interest by public elementary and secondary schools increased from $1.3 billion in 1964–65 to $1.8 billion in 1974–75 and are expected to be $2.5 billion in 1984–85. Projected interest is shown in table 40. The projections are based on the assumption that the 1964–65 to 1974–75 trend will continue through 1984–85. Although capital outlay is expected to level off or decline in the next decade, this assumption seems reasonable because interest payments continue 20 years or more after construction, resulting in debt being incurred at a greater rate than it is being eliminated. The trend formula for projecting interest (Y) in 1974–75 dollars was as follows: $Y' = \$1{,}226 + \$62(t)$; (t = time in years, t = 1 in 1964–65).

Nonpublic Elementary and Secondary Schools (tables 35, 36)

Expenditure data for nonpublic elementary and secondary schools comparable with those for public schools are nonexistent. It is extremely difficult to arrive at a universally accepted method for determining the value of donated services for nonpublic schools, even if data on actual expenditures were collected. These donated services make up a substantial part of nonpublic school resources, especially in the elementary and secondary schools operated by religious orders. In 1970–71, nearly 70 percent of the over 216,000 nonpublic school teachers belonged to religious orders of the Roman Catholic Church. Also, it might be argued that many of the remaining nonpublic school teachers, whose salaries generally run lower than those in public schools, really donated part of their services.

Although it is difficult to arrive at national estimates of nonpublic school expenditures that everyone will accept, the substantial contribution of nonpublic elementary and secondary schools cannot be ignored when total expenditures for education are being considered. Therefore, illustrative estimates of nonpublic elementary and secondary school expenditures were developed rather arbitrarily and are shown in table 35. They are based on the assumption that the cost per teacher (including donated facilities and services) in nonpublic schools is the same as in the public schools. The formula was as follows: $Y = XP$ (X = ratio of nonpublic to public school teachers and P = public school expenditures). The ratio of nonpublic to public school teachers was around 12 percent during the last 10 years and is expected to be around 11 percent during the next 10 years. The numbers upon which these ratios were computed are shown in table 27.

Some previous estimates published by the National Center for Education Statistics were based on the assumption that per-pupil costs in nonpublic schools were the same as in public schools. Since the average pupil-teacher ratio is higher in nonpublic than in public schools, the previous estimates were higher than those shown here. Both types of estimates are, in a sense, hypothetical; one shows what it would cost to educate nonpublic elementary and secondary school children if they were enrolled in public schools and if the public school pupil-teacher ratio were maintained; the other (tables 35 and 36) shows the cost if the pupil-teacher ratio were maintained at the nonpublic school level. Neither of these hypotheses allows for including nonpublic pupils in public schools where capacity is already available.

Institutions of Higher Education

Current Expenditures (tables 35, 41)

Annual current expenditures of institutions of higher education (in 1974–75 dollars) increased from $16.9 billion in 1964–65 to $36.4 billion in 1974–75. They are expected to reach $49.2 billion by 1984–85. The projected data are based largely upon projections of enrollment and upon the trend of increasing costs per student expressed in constant dollars. The result is an estimated constant-dollar increase of $19.5 billion over the past 10 years, 1964–74 (table 35). When expressed in terms of current expenditures per full-time-equivalent student, the data in constant 1974–75 dollars are as follows:

Item	1964–65	1974–75	1984–85
Total current expenditures	$4,093	$4,666	$5,783
Publicly controlled institutions	3,504	4,024	5,017
Nonpublicly controlled institutions	5,183	6,719	8,813

Current expenditures are divided into six functional components: Student education, organized research, related activities, auxiliary enterprises, student aid, and major public services.

Student education encompasses general administration, instruction and departmental research, sponsored programs (excluding sponsored research), libraries, and operation and maintenance. Extension and nonmajor public services are not included under student education, having been shifted to related activities in conformity with reporting change requirements. Expenditures for student education were projected by use of the trend of annual expenditures per full-time-equivalent student over the 10-year base period in conjunction with the projected enrollment of such students (see table 41). When expressed in terms of current expenditures per full-time-equivalent student, the data in constant 1974–75 dollars are as follows:

Item	1964–65	1974–75	1984–85
Total expenditures for student education	$2,167	$3,070	$4,052
Publicly controlled institutions	1,936	2,796	3,705
Nonpublicly controlled institutions	2,593	3,945	5,427

Current expenditures for major public services were reported as a component of education and general expenditures until 1968–69. All data for education and general expenditures for the base years of 1964–65 through 1967–68 now reflect an adjustment beginning in 1968–69 which excludes major public services from educational and general items. The series for major public services, with 1964–65 data estimated, in billions of 1974–75 constant dollars, are as follows (the trend frozen at the 1976–77 level):

Item	1964–65	1974–75	1984–85
Total current expenditures for major public services	$1.5	$2.9	$3.0
Publicly controlled institutions	.7	1.5	1.6
Nonpublicly controlled institutions	.8	1.4	1.4

The projection of expenditures for organized research was made without regard to relationship to other components, with the exception that the amount estimated as a portion of major public services prior to 1968–69 was deleted. The trend was frozen at the 1976–77 level. The data, in billions of 1974–75 constant dollars, are as follows:

Item	1964–65	1974–75	1984–85
Total expenditures for organized research	$2.6	$2.9	$2.9
Publicly controlled institutions	1.3	1.9	2.0
Nonpublicly controlled institutions	1.3	1.0	.9

The projections of related activities (including extension and nonmajor public services), auxiliary enterprises, and student aid were done on the basis of percentage relationship to student education expenditures during the base period. As in the instance of organized research, the amount of related activities estimated as a portion of major public services prior to 1968–69 was deleted. The trend for related activities and student aid as a percentage of student education was frozen at the 1976–77 level. The data, in terms of percentage of student education, are as follows:

Item	Percentage of student education 1964–65	1974–75	1984–85
Total current expenditures for related activities (including extension and nonmajor public service):			
Publicly controlled institutions	15.82	7.16	6.12
Nonpublicly controlled institutions	6.04	6.88	6.92

Item	Percentage of student education 1964–65	 1974–75	 1984–85
Total current expenditures for auxiliary enterprises:			
Publicly controlled institutions	30.50	12.75	10.55
Nonpublicly controlled institutions	34.84	20.35	18.40
Total current expenditures for student aid:			
Publicly controlled institutions	4.06	5.93	6.11
Nonpublicly controlled institutions	10.02	12.81	13.08

Capital Outlay (tables 35, 43)

Annual capital outlay of institutions of higher education (in 1974–75 dollars) peaked at $7.3 billion in 1966–67 and 1967–68 during the decade beginning 1964–65, but is estimated at $3.8 billion for 1974–75 and $3.0 billion for 1984–85. Capital outlay over the entire 10-year base period of 1964–65 to 1974–75 amounted to an estimated total of $58.4 billion (in 1974–75 dollars) and is expected to total $30.4 billion (in 1974–75 dollars) over the 10-year projected period of 1975–76 to 1984–85. Estimates and projections through 1976–77 are based on the declines shown in actual capital outlay from 1969–70 through 1972–73. In view of relatively stabilized enrollment projections from 1976–77 to 1984–85, capital outlay, in constant 1974–75 dollars, was frozen at the 1976–77 level.

Table 35.—Expenditures (1974–75 dollars) of regular educational institutions, by instructional level and institutional control: United States, 1964–65 to 1984–85

(In billions of 1974–75 dollars)

Year and control	Total (all levels)	Elementary and secondary schools[1] (nonpublic school expenditures estimated on the basis of expenditures per teacher in public schools)				Institutions of higher education[2]		
		Total	Current expend-itures[3]	Capital outlay[4]	Interest[5]	Total	Current expend-itures[6]	Capital outlay[7]
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1964–65:								
Total	$68.6	$46.0	$36.0	$8.5	$1.5	$22.6	$16.9	$5.7
Public	53.2	40.6	31.8	7.5	1.3	12.6	9.4	3.2
Nonpublic	15.4	5.4	4.2	1.0	.2	10.0	7.5	2.5
1965–66:								
Total	75.5	49.6	39.7	8.4	1.5	25.9	19.4	6.5
Public	58.8	43.8	35.1	7.4	1.3	15.0	10.9	4.1
Nonpublic	16.7	5.8	4.6	1.0	.2	10.9	9.5	2.4
1966–67:								
Total	81.6	52.9	42.9	8.3	1.7	28.7	21.4	7.3
Public	64.2	47.0	38.1	7.4	1.5	17.2	12.4	4.8
Nonpublic	17.4	5.9	4.8	.9	.2	11.5	9.0	2.5
1967–68:								
Total	88.7	57.3	47.2	8.4	1.7	31.4	24.1	7.3
Public	70.5	51.1	42.1	7.5	1.5	19.4	14.6	4.8
Nonpublic	18.2	6.2	5.1	.9	.2	12.0	9.5	2.5
1968–69:								
Total	91.2	53.5	48.3	8.5	1.7	32.7	26.0	6.7
Public	73.3	52.4	43.3	7.6	1.5	20.9	16.0	4.9
Nonpublic	17.9	6.1	5.0	.9	.2	11.8	10.0	1.8
1969–70:								
Total	97.3	62.8	53.1	7.9	1.8	34.5	27.9	6.6
Public	78.7	56.6	47.9	7.1	1.6	22.1	17.4	4.7
Nonpublic	18.6	6.2	5.2	.8	.2	12.4	10.5	1.9
1970–71:								
Total	100.5	64.7	55.0	7.8	1.9	35.8	29.7	6.1
Public	81.5	58.1	49.4	7.0	1.7	23.4	19.0	4.4
Nonpublic	19.0	6.6	5.6	.8	.2	12.4	10.7	1.7
1971–72:								
Total	103.9	67.1	59.0	6.2	1.9	36.8	31.4	5.4
Public	84.5	60.4	53.1	5.6	1.7	24.1	20.2	3.9
Nonpublic	19.4	6.7	5.9	.6	.2	12.7	11.2	1.5

See footnotes at end of table.

Table 35.—Expenditures (1974–75 dollars) of regular educational institutions, by instructional level and institutional control: United States, 1964–65 to 1984–85—Continued

(In billions of 1974–75 dollars)

Year and control	Total (all levels)	Elementary and secondary schools[1] (nonpublic school expenditures estimated on the basis of expenditures per teacher in public schools)				Institutions of higher education[2]		
		Total	Current expenditures[3]	Capital outlay[4]	Interest[5]	Total	Current expenditures[6]	Capital outlay[7]
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1972–73:								
Total	$108.2	$70.5	$63.2	$5.2	$2.1	$37.7	$33.0	$4.7
Public	88.5	63.6	57.0	4.7	1.9	24.9	21.4	3.5
Nonpublic	19.7	6.9	6.2	.5	.2	12.8	11.6	1.2
1973–74:								
Total	109.6	71.0	63.0	5.9	2.1	38.6	34.4	4.2
Public	89.8	64.2	57.0	5.3	1.9	25.6	22.4	3.2
Nonpublic	19.8	6.8	6.0	.6	.2	13.0	12.0	1.0
1974–75:								
Total	108.4	68.2	60.1	6.1	2.0	40.2	36.4	3.8
Public	88.4	61.6	54.3	5.5	1.8	26.8	23.9	2.9
Nonpublic	20.0	6.6	5.8	.6	.2	13.4	12.5	.9
				PROJECTED				
1975–76:								
Total	110.3	69.0	61.2	5.7	2.1	41.3	37.9	3.4
Public	90.2	62.5	55.4	5.2	1.9	27.7	25.1	2.6
Nonpublic	20.1	6.5	5.8	.5	.2	13.6	12.8	.8
1976–77:								
Total	112.6	69.7	62.2	5.4	2.1	42.9	39.9	3.0
Public	92.2	63.2	56.4	4.9	1.9	29.0	26.6	2.4
Nonpublic	20.4	6.5	5.8	.5	.2	13.9	13.3	.6
1977–78:								
Total	114.5	69.8	62.6	5.0	2.2	44.7	41.7	3.0
Public	93.7	63.3	56.8	4.5	2.0	30.4	28.0	2.4
Nonpublic	20.8	6.5	5.8	.5	.2	14.3	13.7	.6
1978–79:								
Total	116.0	69.5	62.6	4.6	2.3	46.5	43.5	3.0
Public	94.8	63.1	56.8	4.2	2.1	31.7	29.3	2.4
Nonpublic	21.2	6.4	5.8	.4	.2	14.8	14.2	.6
1979–80:								
Total	116.8	68.8	62.0	4.4	2.4	48.0	45.0	3.0
Public	95.4	62.5	56.3	4.0	2.2	32.9	30.5	2.4
Nonpublic	21.4	6.3	5.7	.4	.2	15.1	14.5	.6
1980–81:								
Total	118.2	68.8	62.0	4.4	2.4	49.4	46.4	3.0
Public	96.3	62.3	56.1	4.0	2.2	34.0	31.6	2.4
Nonpublic	21.9	6.5	5.9	.4	.2	15.4	14.8	.6

Table 35.—Expenditures (1974–75 dollars) of regular educational institutions, by instructional level and institutional control: United States, 1964–65 to 1984–85—Continued

(In billions of 1974–75 dollars)

Year and control	Total (all levels)	Elementary and secondary schools[1] (nonpublic school expenditures estimated on the basis of expenditures per teacher in public schools)				Institutions of higher education[2]		
		Total	Current expend-itures[3]	Capital outlay[4]	Interest[5]	Total	Current expend-itures[6]	Capital outlay[7]
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1981–82:								
Total	$119.2	$68.6	$61.7	$4.4	$2.5	$50.6	$47.6	$3.0
Public	97.1	62.1	55.8	4.0	2.3	35.0	32.6	2.4
Nonpublic	22.1	6.5	5.9	.4	.2	15.6	15.0	.6
1982–83:								
Total	120.6	68.9	61.8	4.4	2.7	51.7	48.7	3.0
Public	98.1	62.2	55.8	4.0	2.4	35.9	33.5	2.4
Nonpublic	22.5	6.7	6.0	.4	.3	15.8	15.2	.6
1983–84:								
Total	121.5	69.4	62.2	4.4	2.8	52.1	49.1	3.0
Public	99.0	62.7	56.2	4.0	2.5	36.3	33.9	2.4
Nonpublic	22.5	6.7	6.0	.4	.3	15.8	15.2	.6
1984–85:								
Total	122.3	70.1	62.9	4.4	2.8	52.2	49.2	3.0
Public	99.9	63.4	56.9	4.0	2.5	36.5	34.1	2.4
Nonpublic	22.4	6.7	6.0	.4	.3	15.7	15.1	.6

[1] Excludes expenditures for residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, and federally operated schools on Federal installations. See text table on expenditures by source of funds for data on these schools. All nonpublic elementary and secondary school expenditures shown here are estimated on the basis of expenditures per teacher in public elementary and secondary schools.

[2] Includes expenditures for subcollegiate departments of institutions of higher education, estimated at $95 million in 1974–75. Excludes expenditures for interest paid from plant funds. (An estimated $400 million was expended for total interest in 1974–75.)

[3] Includes current expenditures of public elementary and secondary school systems for community services, summer schools, community colleges, and adult education.

[4] Includes capital outlay of State and local school building authorities.

[5] Interest for nonpublic schools is based on interest for public schools.

[6] Includes expenditures for interest from current funds. Excludes expenditures from current funds for capital outlay.

[7] The estimated annual capital outlay data shown here include estimated expenditures for replacement and rehabilitation.

NOTE.—Data are for 50 States and the District of Columbia.

SOURCES: Data are a summary of tables 37 through 43, each of which indicates sources of data.

Table 36.—Expenditures (current dollars) of regular educational institutions, by instructional level and institutional control: United States, 1964–65 to 1975–76

(In billions of current dollars)

Year and control	Total (all levels)	Elementary and secondary schools[1] (nonpublic school expenditures estimated on the basis of expenditures per teacher in public schools)				Institutions of higher education[2]		
		Total	Current expenditures[3]	Capital outlay[4]	Interest[5]	Total	Current expenditures[6]	Capital outlay[7]
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1964–65:								
Total	$39.6	$26.7	$21.6	$4.2	$.9	$12.9	$10.1	$2.8
Public	30.8	23.6	19.1	3.7	.8	7.2	5.6	1.6
Nonpublic ..	8.8	3.1	2.5	.5	.1	5.7	4.5	1.2
1965–66:								
Total	44.9	29.7	24.5	4.3	.9	15.2	11.9	3.3
Public	35.1	26.3	21.7	3.8	.8	8.8	6.7	2.1
Nonpublic ..	9.8	3.4	2.8	.5	.1	6.4	5.2	1.2
1966–67:								
Total	49.4	31.9	26.4	4.5	1.0	17.5	13.6	3.9
Public	38.7	28.3	23.4	4.0	.9	10.4	7.9	2.5
Nonpublic ..	10.7	3.6	3.0	.5	.1	7.1	5.7	1.4
1967–68:								
Total	56.9	37.0	31.1	4.8	1.1	19.9	15.8	4.1
Public	45.3	33.0	27.7	4.3	1.0	12.3	9.6	2.7
Nonpublic ..	11.6	4.0	3.4	.5	.1	7.6	6.2	1.4
1968–69:								
Total	61.6	39.6	33.3	5.2	1.1	22.0	17.9	4.1
Public	49.5	35.5	29.8	4.7	1.0	14.0	11.0	3.0
Nonpublic ..	12.1	4.1	3.5	.5	.1	8.0	6.9	1.1
1969–70:								
Total	69.9	45.2	38.7	5.2	1.3	24.7	20.3	4.4
Public	56.6	40.8	34.9	4.7	1.2	15.8	12.7	3.1
Nonpublic ..	13.3	4.4	3.8	.5	.1	8.9	7.6	1.3
1970–71:								
Total	76.4	49.3	42.2	5.7	1.4	27.1	22.8	4.3
Public	62.0	44.3	37.9	5.1	1.3	17.7	14.6	3.1
Nonpublic ..	14.4	5.0	4.3	.6	.1	9.4	8.2	1.2

See footnotes at end of table

Table 36.—Expenditures (current dollars) of regular educational institutions, by instructional level and institutional control: United States, 1964–65 to 1975–76—Continued

(In billions of current dollars)

Year and control	Total (all levels)	Elementary and secondary schools[1] (nonpublic school expenditures estimated on the basis of expenditures per teacher in public schools)				Institutions of higher education[2]		
		Total	Current expend-itures[3]	Capital outlay[4]	Interest[5]	Total	Current expend-itures[6]	Capital outlay[7]
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1971–72:								
Total	$82.7	$53.5	$46.9	$5.0	$1.6	$29.2	$24.9	$4.3
Public	67.2	48.1	42.2	4.5	1.4	19.1	16.0	3.1
Nonpublic	15.5	5.4	4.7	.5	.2	10.1	8.9	1.2
1972–73:								
Total	88.9	57.5	51.2	4.5	1.8	31.4	27.3	4.1
Public	72.6	51.9	46.2	4.1	1.6	20.7	17.7	3.0
Nonpublic	16.3	5.6	5.0	.4	.2	10.7	9.6	1.1
1973–74:								
Total	98.0	63.0	55.6	5.5	1.9	35.0	31.0	4.0
Public	80.1	56.9	50.2	5.0	1.7	23.2	20.2	3.0
Nonpublic	17.9	6.1	5.4	.5	.2	11.8	10.8	1.0
1974–75:								
Total	108.4	68.2	60.1	6.1	2.0	40.2	36.4	3.8
Public	88.4	61.6	54.3	5.5	1.8	26.8	23.9	2.9
Nonpublic	20.0	6.6	5.8	.6	.2	13.4	12.5	.9
	PROJECTED							
1975–76:								
Total	119.7	74.8	66.5	6.1	2.2	44.9	41.3	3.6
Public	97.8	67.7	60.2	5.5	2.0	30.1	27.3	2.8
Nonpublic	21.9	7.1	6.3	.6	.2	14.8	14.0	.8

[1] Excludes expenditures for residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, and federally operated schools on Federal installations. See text table on expenditures by source of funds for data on these schools. All nonpublic elementary and secondary school expenditures shown here are estimated on the basis of expenditures per teacher in public elementary and secondary schools.

[2] Includes expenditures for subcollegiate departments of institutions of higher education, estimated at $95 million in 1974–75. Includes expenditures for interest from current funds and excludes interest paid from plant funds. (An estimated $400 million was expended for total interest in 1974–75.)

[3] Includes current expenditures of public elementary and secondary school systems for community services, summer schools, community colleges, and adult education. Interest is included in the estimated current expenditures of nonpublic schools.

[4] Includes capital outlay of State and local school building authorities.

[5] Interest for nonpublic schools is based on interest for public schools.

[6] Includes expenditures for interest from current funds. Excludes expenditures from current funds. Excludes expenditures from current funds for capital outlay.

[7] The estimated annual capital outlay data shown here include estimated expenditures for replacement and rehabilitation.

NOTE.—Data are for 50 States and the District of Columbia.

SOURCES: Data are a summary of tables 37 through 43, each of which indicates sources of data.

Table 37.—Current expenditures of public school systems: United States, 1964–65 to 1984–85

Year	Average daily attendance (in thousands)	Allocated to pupil costs[1]				All programs[2]	
		Per pupil in average daily attendance		Total (in billions)		Total (in billions)	
		Current dollars	1974–75 dollars	Current dollars	1974–75 dollars	Current dollars	1974–75 dollars
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1964–65[3]	38,600	$484.00	$802	$18.6	$31.0	$19.1	$31.8
1965–66	39,154	537.35	872	21.1	34.1	21.7	35.1
1966–67[3]	40,962	569.00	895	22.6	36.7	23.4	38.1
1967–68	40,828	658.26	1,002	26.9	40.9	27.7	42.1
1968–69	41,157	696.00	1,011	28.6	41.6	29.8	43.3
1969–70	41,934	815.98	1,119	34.2	46.9	34.9	47.9
1970–71[3]	42,428	860.00	1,122	36.5	47.6	37.9	49.4
1971–72[3]	42,254	989.67	1,246	41.8	52.6	42.2	53.1
1972–73[3]	42,170	1,074.00	1,299	45.4	54.8	46.2	57.0
1973–74[4]	41,893	1,147.00	1,274	48.1	53.4	50.2	55.7
1974–75[3]	41,405	1,255.00	1,255	52.0	52.0	54.3	54.3
	PROJECTED[5]						
1975–76	41,100	1,409	1,295	57.9	53.2	60.2	55.4
1976–77	40,800	....	1,329	....	54.2	....	56.4
1977–78	40,200	....	1,358	....	54.6	....	56.8
1978–79	39,500	....	1,382	....	54.6	....	56.8
1979–80	38,600	....	1,403	....	54.2	....	56.3
1980–81	38,000	....	1,420	....	54.0	....	56.1
1981–82	37,400	....	1,434	....	53.6	....	55.8
1982–83	37,100	....	1,446	....	53.6	....	55.8
1983–84	37,100	....	1,456	....	54.0	....	56.2
1984–85	37,400	....	1,464	....	54.8	....	56.9

[1] Includes only the current expenditures for public day schools allocated to pupil costs; excludes the other expenditures shown in footnote 2.

[2] Includes current expenditures for summer schools, adult education, and community colleges operated by school districts, in addition to expenditures allocable to pupil costs.

[3] Derived from estimates furnished by States.

[4] Derived from *Estimates of School Statistics, 1974–75*, National Education Association, Research Division.

[5] The projections of current expenditures of public school systems are based on these assumptions: (a) The ratio of average daily attendance to enrollment in grades K-12 of public schools (table 3) will remain constant at the level of 0.92 through 1984–85. (b) Current expenditures allocated to costs per pupil in average daily attendance will follow the 1964–65 through 1974–75 trend. (c) The ratio of current expenditures for all programs to current expenditures allocated to pupil costs will remain constant at the level of 1.04.

[6] Based on the assumption that the 1974–75 rate of inflation will continue through 1975–76.

For methodological details, see appendix A, table A-4, and discussion in text.

NOTE.—Data are for 50 States and the District of Columbia for all years. The expenditures shown in this table include current expenditures for administration of State boards of education and intermediate administrative units. Column 6 equals column 2 times column 4 and column 8 equals column 6 times 1.04.

SOURCES.[illegible] are based on U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Statistics of State School Systems*, 1965–66 through 1971–72, and (2) *Statistics of Public Schools*, fall 1966 through 1974. Current expenditures were converted to 1974–75 dollars on the basis of the Consumer Price Index prepared by the Bureau of Labor Statistics, U.S. Department of Labor. (For method of converting, see appendix B, table B-9.)

Table 38.—Current expenditures for salaries of instructional staff in regular public elementary and secondary schools: United States, 1964–65 to 1984–85

Year	Number of instructional staff[1] (in thousands)	Salaries of instructional staff[2]			
		Average annual salary		Total (in billions)	
		Current dollars	1974–75 dollars	Current dollars	1974–75 dollars
(1)	(2)	(3)	(4)	(5)	(6)
1964–65	1,813	$6,400	$10,606	$11.6	$19.2
1965–66	1,885	6,935	11,249	13.1	21.2
1966–67[3]	1,984	7,110	11,186	14.1	22.2
1967–68	2,071	7,905	12,035	16.4	24.9
1968–69[3]	2,164	8,200	11,911	17.7	25.8
1969–70	2,253	8.840	12,123	19.9	27.3
1970–71[3]	2,296	9,570	12,480	22.0	28.7
1971–72	2,288	10,100	12,713	23.1	29.1
1972–73[3]	2,339	10,608	12,835	24.8	30.0
1973–74[4]	2,379	11,253	12,496	26.8	29.7
1974–75[3]	2,416	12.070	12,070	29.2	29.2
		PROJECTED[5]			
1975–76	2,426	13,400	12,300	32.5	29.8
1976–77	2,438	....	12,500	....	30.5
1977–78	2,427	....	12,700	....	30.8
1978–79	2,411	....	12,800	....	30.9
1979–80	2,383	....	12,900	....	30.7
1980–81	2,355	....	13,000	....	30.6
1981–82	2,344	....	13,100	....	30.7
1982–83	2,340	....	13,200	....	30.9
1983–84	2,354	....	13,200	....	31.1
1984–85	2,388	....	13,300	....	31.8

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[1] Data on number of instructional staff from table 31.

[2] Average annual salaries of instructional staff are about 4 percent higher than the salaries of classroom teachers.

[3] Estimates of salaries furnished by State education departments.

[4] Derived from *Estimates of School Statistics, 1974–75*, National Education Association, Research Division.

[5] Projections of current expenditures for salaries of instructional staff in public elementary and secondary schools are based on these assumptions: (a) Average annual salaries will follow the 1965–66 through 1974–75 trend. (b) The ratio of instructional staff to classroom teachers in regular public schools will follow the 1965–66 through 1974–75 trend.

NOTE.—Data are for 50 States and the District of Columbia for all years.

SOURCES: Data are based on U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Statistics of State School Systems*, 1965–66 through 1971–72, and (2) *Statistics of Public Schools*, fall 1966 through 1974. Conversion to 1974–75 dollars was based on the Consumer Price Index prepared by the Bureau of Labor Statistics, U.S. Department of Labor. (For method of converting, see appendix B, table B-9.)

Table 39.—Capital outlay of public elementary and secondary school systems: United States, 1964–65 through 1984–85

(In millions)

Year	Total capital outlay including construction, equipment, etc.	
	Current dollars	1974–75 dollars
(1)	(2)	(3)
1964–65[1]	$3,700	$7,549
1965–66	3,755	7,385
1966–67[1]	4,000	7,444
1967–68	4,256	7,517
1968–69[1]	4,654	7,593
1969–70	4,659	7,107
1965–66 to 1969–70	21,324	37,046
1970–71[1]	5,061	7,028
1971–72	4,459	5,575
1972–73[1]	4,091	4,695
1973–74[2]	[3]4,989	5,286
1974–75	5,492	5,492
1970–71 to 1974–75	24,092	28,076
	PROJECTED[3]	
1975–76	5,534	5,176
1976–77	....	4,859
1977–78	....	4,543
1978–79	....	4,226
1979–80	....	4,000
1975–76 to 1979–80	....	22,804
1980–81	....	4,000
1981–82	....	4,000
1982–83	....	4,000
1983–84	....	4,000
1984–85	....	4,000
1980–81 to 1984–85	....	20,000

[1] Estimates furnished by State education departments.

[2] Derived from *Estimates of School Statistics, 1974–75*, National Education Association, Research Division.

[3] Projections of capital outlay of public elementary and secondary school systems are based on the assumption that these expenditures will follow the 1964–65 through 1974–75 trend through 1978–79 and remain constant at $4 billion through 1984–85.

NOTE.—Data are for 50 States and the District of Columbia for all years.

SOURCES: Data are based on U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Statistics of State School Systems* 1965–66 through 1971–72; (2) *Statistics of Public Schools*, fall 1966 through fall 1974; and (3) *Expenditures and Revenues for Public Elementary and Secondary Education*, 1970–71 and 1972–73. Conversion to 1974–75 dollars was based on the Consumer Price Index prepared by the Bureau of Labor Statistics, U.S. Department of Labor. (For method of converting, see appendix B, table B-9.)

Table 40.—Expenditures for interest by public elementary and secondary school systems: United States, 1964–65 to 1984–85

(In millions)

Year	Total interest including payments to schoolhousing authorities or similar agencies	
	Current dollars	1974–75 dollars
(1)	(2)	(3)
1964–65[1]	$761	$1,261
1965–66	792	1,285
1966–67[1]	949	1,493
1967–68	978	1,489
1968–69[1]	1,015	1,474
1969–70	1,171	1,606
1970–71[1]	1,318	1,719
1971–72	1,378	1,722
1972–73[2]	1,547	1,872
1973–74[3]	1,672	1,857
1974–75	1,795	1,795
	PROJECTED[4]	
1975–76	2,033	1,868
1976–77	....	1,941
1977–78	....	2,014
1978–79	....	2,087
1979–80	....	2,160
1980–81	....	2,233
1981–82	....	2,306
1982–83	....	2,380
1983–84	....	2,452
1984–85	....	2,526

[1] Estimates furnished by State education departments.

[2] Data from special study of expenditures and revenues for public elementary and secondary school systems.

[3] Derived from *Estimates of School Statistics, 1974–75*, National Education Association, Research Division.

[4] Projections of interest expenditures are based on assumption they will follow the 1964–65 through 1974–75 trend.

NOTE.—Data are for 50 States and the District of Columbia for all years.

SOURCES: Data are based on (1) U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: *Statistics of State School Systems*, 1965–66 through 1971–72; *Statistics of Public Schools*, fall 1964 through fall 1974; *Expenditures and Revenues for Public Elementary and Secondary Education*, 1970–71 and 1972–73; and (2) National Education Association, Research Division, *Estimates of School Statistics, 1974–75*. Conversion to 1974–75 dollars was based on the Consumer Price Index prepared by the Bureau of Labor Statistics, U.S. Department of Labor. (For method of converting, see appendix B, table B-9.)

Table 41.—Expenditures from current funds and total current expenditures (1974–75 dollars), by institutions of higher education: United States, 1964–65 to 1984–85

(In billions of 1974–75 dollars)

Year and control	Educational and general purposes			Auxiliary enterprises[4]	Student aid[5]	Major public services[6]	Total expenditures from current funds (sum of columns 2 through 7)	Capital outlay from current funds only	Total current expenditures[7] (column 8 less column 9)
	Student education[1]	Organized research[2]	Related activities[3]						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1964–65:[8]									
Total	$9.0	$2.6	$1.0	$2.9	$.6	$1.5	$17.6	$.7	$16.9
Public	5.2	1.3	.8	1.6	.2	.7	9.8	.4	9.4
Nonpublic .	3.8	1.3	.2	1.3	.4	.8	7.8	.3	7.5
1965–66:									
Total	10.3	2.8	1.3	3.5	.6	1.7	20.2	.8	19.4
Public	6.1	1.4	1.0	1.9	.2	.8	11.4	.5	10.9
Nonpublic .	4.2	1.4	.3	1.6	.4	.9	8.8	.3	8.5
1966–67:									
Total	11.8	2.9	1.3	3.6	.9	1.8	22.3	.9	21.4
Public	7.2	1.5	1.0	2.0	.4	.9	13.0	.6	12.4
Nonpublic .	4.6	1.4	.3	1.6	.5	.9	9.3	.3	9.0
1967–68:									
Total	13.7	3.0	1.6	3.9	1.1	1.8	25.1	1.0	24.1
Public	8.7	1.7	1.2	2.3	.5	.9	15.3	.7	14.6
Nonpublic .	5.0	1.3	.4	1.6	.6	.9	9.8	.3	9.5
1968–69:									
Total	15.6	3.0	1.5	3.7	1.1	1.9	26.8	.8	26.0
Public	10.1	1.8	1.1	2.1	.5	1.0	16.6	.6	16.0
Nonpublic .	5.5	1.2	.4	1.6	.6	.9	10.2	.2	10.0
1969–70:									
Total	17.1	3.0	1.6	3.8	1.3	2.1	28.9	1.0	27.9
Public	11.3	1.8	1.2	2.2	.6	1.1	18.2	.8	17.4
Nonpublic .	5.8	1.2	.4	1.6	.7	1.0	10.7	.2	10.5
1970–71:									
Total	18.5	2.8	1.7	3.9	1.4	2.2	30.5	.8	29.7
Public	12.4	1.7	1.3	2.3	.7	1.2	19.6	.6	19.0
Nonpublic .	6.1	1.1	.4	1.6	.7	1.0	10.9	.2	10.7
1971–72:									
Total	19.6	2.8	1.8	4.0	1.6	2.4	32.2	.8	31.4
Public	13.3	1.7	1.3	2.4	.8	1.3	20.8	.6	20.2
Nonpublic .	6.3	1.1	.5	1.6	.8	1.1	11.4	.2	11.2
1972–73:									
Total	20.9	2.9	1.7	4.0	1.6	2.7	33.8	.8	33.0
Public	14.3	1.8	1.3	2.4	.8	1.4	22.0	.6	21.4
Nonpublic .	6.6	1.1	.4	1.6	.8	1.3	11.8	.2	11.6

See footnotes at end of table.

Table 41.—Expenditures from current funds and total current expenditures (1974–75 dollars), by institutions of higher education: United States, 1964–65 to 1984–85—Continued

(In billions of 1974–75 dollars)

Year and control	Educational and general purposes			Auxiliary enterprises[4]	Student aid[5]	Major public services[6]	Total expenditures from current funds (sum of columns 2 through 7)	Capital outlay from current funds only	Total current expenditures[7] (column 8 less column 9)
	Student education[1]	Organized research[2]	Related activities[3]						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1973–74:[8]									
Total	22.1	2.9	1.7	3.8	1.8	2.9	35.2	.8	34.4
Public	15.2	1.9	1.2	2.3	.9	1.5	23.0	.6	22.4
Nonpublic .	6.9	1.0	.5	1.5	.9	1.4	12.2	.2	12.0
1974–75:[8]									
Total	24.0	2.9	1.7	3.6	1.9	2.9	37.0	.6	36.4
Public	16.7	1.9	1.2	2.1	1.0	1.5	24.4	.5	23.9
Nonpublic .	7.3	1.0	.5	1.5	.9	1.4	12.6	.1	12.5
				PROJECTED[9]					
1975–76:									
Total	25.6	2.9	1.6	3.3	2.1	3.0	38.5	.6	37.9
Public	17.9	2.0	1.1	1.9	1.1	1.6	25.6	.5	25.1
Nonpublic .	7.7	.9	.5	1.4	1.0	1.4	12.9	.1	12.8
1976–77:									
Total	27.0	2.9	1.8	3.5	2.2	3.0	40.4	.5	39.9
Public	19.0	2.0	1.2	2.0	1.2	1.6	27.0	.4	26.6
Nonpublic .	8.0	.9	.6	1.5	1.0	1.4	13.4	.1	13.3
1977–78:									
Total	28.5	2.9	1.8	3.7	2.3	3.0	42.2	.5	41.7
Public	20.2	2.0	1.2	2.2	1.2	1.6	28.4	.4	28.0
Nonpublic .	8.3	.9	.6	1.5	1.1	1.4	13.8	.1	13.7
1978–79:									
Total	29.9	2.9	1.9	3.8	2.5	3.0	44.0	.5	43.5
Public	21.3	2.0	1.3	2.2	1.3	1.6	29.7	.4	29.3
Nonpublic .	8.6	.9	.6	1.6	1.2	1.4	14.3	.1	14.2
1979–80:									
Total	31.1	2.9	2.0	3.9	2.6	3.0	45.5	.5	45.0
Public	22.2	2.0	1.4	2.3	1.4	1.6	30.9	.4	30.5
Nonpublic .	8.9	.9	.6	1.6	1.2	1.4	14.6	.1	14.5
1980–81:									
Total	32.2	2.9	2.1	4.1	2.6	3.0	46.9	.5	46.4
Public	23.2	2.0	1.4	2.4	1.4	1.6	32.0	.4	31.6
Nonpublic .	9.0	.9	.7	1.7	1.2	1.4	14.9	.1	14.8
1981–82:									
Total	33.1	2.9	2.2	4.2	2.7	3.0	48.1	.5	47.6
Public	23.9	2.0	1.5	2.5	1.5	1.6	33.0	.4	32.6
Nonpublic .	9.2	.9	.7	1.7	1.2	1.4	15.1	.1	15.0

Table 41.—Expenditures from current funds and total current expenditures (1974–75 dollars), by institutions of higher education: United States, 1964–65 to 1984–85—Continued

(In billions of 1974–75 dollars)

Year and control	Educational and general Purposes			Auxiliary enterprises[4]	Student aid[5]	Major public services[6]	Total expenditures from current funds (sum of columns 2 through 7)	Capital outlay from current funds only	Total current expenditures[7] (column 8 less column 9)
	Student education[1]	Organized research[2]	Related activities[3]						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1982–83:									
Total	34.1	2.9	2.2	4.3	2.7	3.0	49.2	.5	48.7
Public	24.7	2.0	1.5	2.6	1.5	1.6	33.9	.4	33.5
Nonpublic .	9.4	.9	.7	1.7	1.2	1.4	15.3	.1	15.2
1983–84:									
Total	34.4	2.9	2.2	4.4	2.7	3.0	49.6	.5	49.1
Public	25.0	2.0	1.5	2.7	1.5	1.6	34.3	.4	33.9
Nonpublic .	9.4	.9	.7	1.7	1.2	1.4	15.3	.1	15.2
1984–85:									
Total	34.5	2.9	2.2	4.4	2.7	3.0	49.7	.5	49.2
Public	25.2	2.0	1.5	2.7	1.5	1.6	34.5	.4	34.1
Nonpublic .	9.3	.9	.7	1.7	1.2	1.4	15.2	.1	15.1

[1] Includes general administration, instruction and departmental research, libraries, operation and maintenance of the physical plant, and sponsored activities such as training institutes and related sponsored activities which were specifically financed by outside sources. "Extension and nonmajor public services," included under "student education" in previous issues, are included now under "related activities."

[2] Includes all sponsored research and other separately budgeted research with the exception of expenditures for federally funded research and development centers which are included under "major public services."

[3] Includes expenditures for extension and nonmajor public services, laboratory schools, medical school hospitals, dental clinics, home economics cafeterias, agricultural college creameries, college-operated industrial plants connected with instructional programs but not actually integral parts of them, and all other expenditures for educational and general activities which are not specifically identified as expended for "student education" or "organized research." Expenditures for "major public services" which were listed under "related activities" prior to 1968–69 are estimated and reported under "major public services."

[4] "Auxiliary enterprises" includes student dormitories, dining halls, cafeterias, student unions, bookstores, faculty housing, athletic programs not part of the instructional program, lectures, concerts, and expenditures for plant assets from current funds which are not itemized under "educational and general expenditures."

[5] "Student aid" includes only grants to students in the form of scholarships, fellowships, grants-in-aid, and prizes and awards for which no services are required of the student. Loans to students are not included.

[6] Formerly included with the educational and general group prior to 1968–69. For 1964–65 through 1967–68, the data represent expenditures for federally funded research and development centers which were previously reported under "organized research," and for other major public services previously reported under "student education" and "related activities."

[7] Current-fund expenditures less capital outlay from current funds.

[8] Estimated.

[9] The projection of expenditures from current funds is based on the following assumptions: (a) Expenditure for "student education" per full-time-equivalent student will continue to increase as it did during the base period.

(b) "Auxiliary enterprises," "related activities," and "student aid" are projected on the percentage of these items to "student education" during the base period, with the trend frozen at the 1975–76 level for the remainder of the projection. (c) "Organized research" and "major public services" are projected on the base-years trend in dollar amounts and held at the 1975–76 level. (d) The 1973–74 to 1984–85 expenditures from current funds for capital outlay will approximate 16 percent of total capital outlay.

NOTE.–Data are for 50 States and the District of Columbia for all years.

SOURCES: Expenditure data from U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: *Financial Statistics of Institutions of Higher Education*, 1965–66 through 1971–72 and unpublished data for 1972–73. Conversion to 1974–75 dollars was based on the Consumer Price Index published by the Bureau of Labor Statistics, U.S. Department of Labor, and (for capital outlay) on the American Appraisal Company Construction Cost Index. (For method of converting the indexes, see appendix B, table B-7.)

Table 42.—Expenditures from current funds and total current expenditures (current dollars), by institutions of higher education: United States, 1964–65 to 1975–76

(In billions of current dollars)

Year and control	Educational and general purposes			Auxiliary enter-prises[4]	Student aid[5]	Major public services[6]	Total expendi-tures from current funds (sum of columns 2 through 7)	Capital outlay from current funds only	Total current expendi-tures[7] (column 8 less column 9)
	Student educa-tion[1]	Organized research[2]	Related activi-ties[3]						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1964–65:[8]									
Total	$5.4	$1.6	$.6	$1.8	$.3	$.9	$10.6	$.5	$10.1
Public	3.1	.8	.5	1.0	.1	.4	5.9	.3	5.6
Nonpublic .	2.3	.8	.1	.8	.2	.5	4.7	.2	4.5
1965–66:									
Total	6.4	1.8	.8	2.1	.4	1.0	12.5	.6	11.9
Public	3.8	.9	.6	1.2	.1	.5	7.1	.4	6.7
Nonpublic .	2.6	.9	.2	.9	.3	.5	5.4	.2	5.2
1966–67:									
Total	7.5	1.8	.9	2.3	.5	1.2	14.2	.6	13.6
Public	4.6	.9	.7	1.3	.2	.6	8.3	.4	7.9
Nonpublic .	2.9	.9	.2	1.0	.3	.6	5.9	.2	5.7
1967–68:									
Total	9.0	2.0	1.0	2.6	.7	1.2	16.5	.7	15.8
Public	5.7	1.1	.8	1.5	.3	.6	10.0	.4	9.6
Nonpublic .	3.3	.9	.2	1.1	.4	.6	6.5	.3	6.2
1968–69:									
Total	10.7	2.1	1.0	2.5	.9	1.3	18.5	.6	17.9
Public	6.9	1.2	.8	1.4	.4	.7	11.4	.4	11.0
Nonpublic .	3.8	.9	.2	1.1	.5	.6	7.1	.2	6.9
1969–70:									
Total	12.4	2.2	1.2	2.8	1.0	1.5	21.1	.8	20.3
Public	8.2	1.3	.9	1.6	.5	.8	13.3	.6	12.7
Nonpublic .	4.2	.9	.3	1.2	.5	.7	7.8	.2	7.6
1970–71:									
Total	14.2	2.2	1.3	3.0	1.1	1.6	23.4	.6	22.8
Public	9.5	1.3	1.0	1.8	.5	.9	15.0	.4	14.6
Nonpublic .	4.7	.9	.3	1.2	.6	.7	8.4	.2	8.2
1971–72:									
Total	15.5	2.3	1.4	3.2	1.2	1.9	25.5	.6	24.9
Public	10.5	1.4	1.0	1.9	.6	1.0	16.4	.4	16.0
Nonpublic .	5.0	.9	.4	1.3	.6	.9	9.1	.2	8.9
1972–73:									
Total	17.2	2.4	1.5	3.3	1.4	2.2	28.0	.7	27.3
Public	11.8	1.5	1.1	2.0	.7	1.1	18.2	.5	17.7
Nonpublic .	5.4	.9	.4	1.3	.7	1.1	9.8	.2	9.6
1973–74:[8]									
Total	20.0	2.6	1.5	3.5	1.6	2.5	31.7	.7	31.0
Public	13.7	1.7	1.1	2.1	.8	1.3	20.7	.5	20.2
Nonpublic .	6.3	.9	.4	1.4	.8	1.2	11.0	.2	10.8

See footnotes at end of table.

Table 42.—Expenditures from current funds and total current expenditures (current dollars), by institutions of higher education: United States, 1964–65 to 1975–76—Continued

(In billions of current dollars)

Year and control	Educational and general purposes			Auxiliary enterprises[4]	Student aid[5]	Major public services[6]	Total expenditures from current funds (sum of columns 2 through 7)	Capital outlay from current funds only	Total current expenditures[7] (column 8 less column 9)
	Student education[1]	Organized research[2]	Related activities[3]						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1974–75:[8]									
Total	24.0	2.9	1.7	3.6	1.9	2.9	37.0	.6	36.4
Public	16.7	1.9	1.2	2.1	1.0	1.5	24.4	.5	23.9
Nonpublic .	7.3	1.0	.5	1.5	.9	1.4	12.6	.1	12.5
				PROJECTED[9]					
1975–76:									
Total	27.8	3.1	1.8	3.6	2.3	3.3	41.9	.6	41.3
Public	19.4	2.1	1.2	2.1	1.2	1.8	27.8	.5	27.3
Nonpublic .	8.4	1.0	.6	1.5	1.1	1.5	14.1	.1	14.0

[1] Includes general administration, instruction and departmental research, libraries, operation and maintenance of the physical plant, and sponsored activities such as training institutes and related sponsored activities which were specifically financed by outside sources. "Extension and nonmajor public services," included under "student education" prior to 1971–72, are included under "related activities."

[2] Includes all sponsored research and other separately budgeted research, with the exception of expenditures for federally funded research and development centers included under "major public services."

[3] Includes expenditures for extension and nonmajor public services, laboratory schools, medical school hospitals, dental clinics, home economics cafeterias, agricultural college creameries, college-operated industrial plants connected with instructional programs but not actually integral parts of them, and all other expenditures for educational and general activities which are not specifically identified as expended for "student education" or "organized research." Expenditures for "major public services" which were listed under "related activities" prior to 1968–69 are estimated and reported under "major public services."

[4] "Auxiliary enterprises" includes student dormitories, dining halls, cafeterias, student unions, bookstores, faculty housing, athletic programs not part of the instructional program, lectures, concerts, and expenditures for plant assets from current funds which are not itemized under "educational and general expenditures."

[5] "Student aid" includes only grants to students in the form of scholarships, fellowships, grants-in-aid, and prizes and awards for which no services are required of the student. Loans to students are not included.

[6] Prior to 1968–69, included with the educational and general group. For 1964–65 through 1967–68, the data represent expenditures for federally funded research and development centers which were previously reported under "organized research," and for other major public services previously reported under "student education" and "related activities."

[7] Current-fund expenditures less capital outlay from current funds.

[8] Estimated.

[9] Projected by applying Consumer Price Index estimates to the projected expenditures of current funds in constant dollars (table 41).

For further methodological details, see appendix A, table 4.

NOTE.—Data are for 50 States and the District of Columbia for all years.

SOURCES: Expenditure data from U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: *Financial Statistics of Institutions of Higher Education*, 1965–66 through 1971–72, and unpublished data 1972–73.

Table 43.—Capital outlay of institutions of higher education: United States, 1964–65 to 1984–85

Year	Total		Public		Nonpublic	
	Millions of current dollars	Millions of 1974–75 dollars	Millions of current dollars	Millions of 1974–75 dollars	Millions of current dollars	Millions of 1974–75 dollars
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1964–65[1]	$2,825	$5,765	$1,595	$3,255	$1,230	$2,510
1965–66	3,253	6,398	2,064	4,059	1,189	2,339
1966–67	3,943	7,338	2,573	4,788	1,370	2,550
1967–68	4,175	7,373	2,732	4,825	1,443	2,548
1968–69[1]	4,067	6,620	2,978	4,859	1,079	1,761
1969–70	4,332	6,610	3,066	4,678	1,266	1,932
1965–66 to 1969–70	19,760	34,339	13,413	23,209	6,347	11,130
1970–71	4,344	6,032	3,147	4,370	1,197	1,662
1971–72	4,336	5,422	3,156	3,946	1,180	1,476
1972–73	4,091	4,696	3,044	3,494	1,047	1,202
1973–74[2]	3,960	4,196	2,992	3,170	968	1,026
1974–75[2]	3,752	3,752	2,876	2,876	876	876
1970–71 to 1974–75	20,483	24,098	15,215	17,856	5,268	6,242
			PROJECTED[3]			
1975–76	3,590	3,358	2,790	2,610	800	748
1976–77	...	3,007	...	2,368	...	639
1977–78	...	3,007	...	2,368	...	639
1978–79	...	3.007	...	2,368	...	639
1979–80	...	3,007	...	2,368	...	639
1975–76 to 1978–80	...	15,386	...	12,082	...	3,304
1980–81	...	3,007	...	2,368	...	639
1981–82	...	3,007	...	2,368	...	639
1982–83	...	3,007	...	2,368	...	639
1983–84	...	3,007	...	2,368	...	639
1984–85	...	3,007	...	2,368	...	639
1980–81 to 1984–85	...	15,035	...	11,840	...	3,195

[1] Interpolation based on reported value of plant at close of previous year and the beginning of the following year.

[2] Estimated.

[3] Estimates and projections through 1976–77 are based on the declines shown in actual capital outlay since 1969–70 (in constant dollars) and then frozen at that level for the remainder of the projection.

NOTE.—Data are for 50 States and the District of Columbia for all years.

SOURCES: Capital outlay data from U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: *Financial Statistics of Institutions of Higher Education*, 1963–64 through 1971–72, and unpublished data for 1972–73.

CHAPTER VI

Student Charges by Institutions of Higher Education

C. George Lind

Definitions and Limitations

Estimated average student charges are based on the charges reported by institutions of higher education for the years 1964–65, 1966–67, 1968–69, 1971–72, and 1973–74. To the extent that data were available, the reported charges were weighted by the numbers of full-time resident degree-credit students who were subject to the charges. Full-time-equivalent resident undergraduate degree-credit students became the weighting factor in 1973–74. Publicly controlled 2-year institutions which reported a zero tuition charge were included in tuition calculations for the base years through 1971–72 and an estimate was made for comparability in 1973–74.

Estimated average charge per student (entire academic year) (tables 44, 45)

The estimated average student charges (tuition and required fees, board, and room) by publicly controlled institutions of higher education, *in 1974–75 constant dollars*, increased from $1,575 in 1964–65 to $1,708 in 1974–75 and are expected to reach $1,922 by 1984–85 (table 44). Estimated average student charges by nonpublicly controlled institutions of higher education were $3,161 in 1964–65, $3,592 in 1974–75, and are expected to reach $4,248 by 1984–85 (table 44). Please observe that table 44 reflects the adjustment of base data to 1974–75 constant dollars, an adjustment of +65.7% for 1964–65. Tuition and required fees have been largely responsible for the increases in student charges. Tuition and required fees, *in constant 1974–75 dollars*, charged by publicly controlled institutions rose from $403 in 1964–65 to $503 in 1974–75, and are expected to reach $598 by 1984–85. Nonpublicly controlled institutions charged an estimated average tuition and fees of $1,803 in 1964–65, $2,290 in 1974–75, and are projected to be charging $2,884 by 1984–85, *in constant 1974–75 dollars*. Required fees are those for matriculation, laboratory, library, health, etc., but do not include books. The varying charges for tuition and required fees, by control and type of institution, are influenced by income of publicly controlled institutions of higher education from government sources and income of nonpublicly controlled institutions from endowment funds and from private gifts and grants, as well as from varying costs of educating students in different types of institutions.

Charges for board, *in constant 1974–75 dollars*, have declined slightly during the base period, with the exception of those for public 2-year institutions. The declines are not projected since many large institutions had held their board charges unchanged in unadjusted current dollars, and cannot be expected to continue that practice on a long-term basis.

Charges for dormitory rooms have been quite stable, in constant dollars, and are generally higher in nonpublicly controlled institutions than in publicly controlled institutions. The difference is so slight that, by 1984–85, a small difference in the rate of increase should result in publicly controlled institutions charging the higher amount for dormitory rooms.

Table 44.– Estimated average charges (1974–75 dollars) per full-time undergraduate resident degree-credit student in institutions of higher education, by institutional type and control: United States, 1964–65 to 1984–85

(Charges are for the academic year and in constant 1974–75 dollars)

Year and control	Total tuition, board, and room				Tuition and required fees				Board (7-day basis)				Dormitory rooms			
	All	University	Other 4-year	2-year	All	University	Other 4-year	2-year	All	University	Other 4-year	2-year	All	University	Other 4-year	2-year
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1964–65:[1]																
Public	$1,575	$1,742	$1,436	$1,057	$403	$494	$371	$164	$723	$766	$666	$598	$449	$482	$399	$295
Nonpublic ..	3,161	3,648	2,999	2,411	1,803	2,149	1,695	1,163	809	853	794	769	549	646	510	479
1965–66:[2]																
Public	1,595	1,792	1,462	1,087	418	530	389	177	721	768	661	595	456	494	412	315
Nonpublic ..	3,253	3,756	3,078	2,526	1,872	2,220	1,762	1,246	803	858	782	766	578	678	534	512
1966–67:[1]																
Public	1,615	1,842	1,489	1,117	433	566	407	190	719	771	656	592	463	505	426	335
Nonpublic ..	3,342	3,864	3,158	2,641	1,940	2,291	1,828	1,329	796	862	771	766	606	711	559	546
1967–68:[2]																
Public	1,619	1,825	1,517	1,200	431	557	408	218	712	755	665	612	476	513	444	370
Nonpublic ..	3,356	3,873	3,204	2,683	1,974	2,335	1,884	1,359	786	846	763	767	596	692	557	557
1968–69:[1]																
Public	1,624	1,808	1,544	1,283	429	548	408	247	705	739	674	632	490	521	462	404
Nonpublic ..	3,372	3,883	3,249	2,725	2,009	2,379	1,939	1,389	776	831	755	768	587	673	565	568
1969–70:[2]																
Public	1,652	1,868	1,560	1,305	444	586	421	245	701	740	663	637	507	542	476	423
Nonpublic ..	3,473	4,004	3,319	2,734	2,103	2,481	2,015	1,418	771	833	744	749	599	690	560	567
1970–71:[2]																
Public	1,680	1,928	1,576	1,327	459	624	434	243	697	741	652	642	524	563	490	442
Nonpublic ..	3,573	4,125	3,389	2,743	2,197	2,583	2,091	1,447	765	835	733	730	611	707	565	566

See footnotes at end of table.

Table 44.—Estimated average charges (1974–75 dollars) per full-time undergraduate resident degree-credit student in institutions of higher education, by institutional type and control: United States, 1964–65 to 1984–85—Continued

(Charges are for the academic year and in constant 1974–75 dollars)

Year and control	Total tuition, board, and room				Tuition and required fees				Board (7-day basis)				Dormitory rooms			
	All	University	Other 4-year	2-year	All	University	Other 4-year	2-year	All	University	Other 4-year	2-year	All	University	Other 4-year	2-year
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1971–72:[1]																
Public	1,708	1,988	1,590	1,351	473	662	446	242	694	743	641	648	541	583	503	461
Nonpublic ..	3,672	4,248	3,458	2,751	2,291	2,685	2,166	1,475	759	838	721	711	622	725	571	565
1972–73:[2]																
Public	1,701	1,933	1,622	1,365	484	648	474	258	680	717	638	650	537	568	510	457
Nonpublic ..	3,604	4,186	3,412	2,720	2,261	2,660	2,148	1,468	736	816	702	702	607	710	562	550
1973–74:[1]																
Public	$1,692	$1,878	$1,656	$1,379	$494	$634	$503	$273	$665	$691	$636	$653	$533	$553	$517	$453
Nonpublic ..	3,536	4,125	3,365	2,689	2,231	2,635	2,129	1,460	713	795	682	693	592	695	554	536
1974–75:[3]																
Public	1,708	1,903	1,682	1,420	503	653	515	285	660	685	633	661	545	565	534	474
Nonpublic ..	3,592	4,193	3,419	2,724	2,290	2,701	2,188	1,496	704	790	671	684	598	702	560	544
	PROJECTED[4]															
1975–76:																
Public	1,730	1,933	1,711	1,460	513	672	527	296	660	685	633	668	557	576	551	496
Nonpublic ..	3,658	4,266	3,482	2,768	2,350	2,768	2,246	1,532	704	790	671	684	604	708	565	552
1976–77:																
Public	1,751	1,963	1,739	1,501	522	690	538	308	660	685	633	676	569	588	568	517
Nonpublic ..	3,724	4,339	3,547	2,813	2,409	2,834	2,305	1,569	704	790	671	684	611	715	571	560

1977–78:																
Public	1,773	1,993	1,768	1,543	532	709	550	320	660	685	633	684	581	599	585	539
Nonpublic . .	3,789	4,411	3,611	2,857	2,468	2,900	2,363	1,605	704	790	671	684	617	721	577	568
1978–79:																
Public	1,794	2,024	1,797	1,582	541	728	562	331	660	685	633	691	593	611	602	560
Nonpublic . .	3,855	4,485	3,676	2,901	2,528	2,967	2,422	1,641	704	790	671	684	623	728	582	576
1979–80:																
Public	1,815	2,055	1,827	1,623	551	747	574	343	660	685	633	699	604	623	620	581
Nonpublic . . .	3,920	4,557	3,740	2,945	2,587	3,033	2,481	1,677	704	790	671	684	629	734	588	584
1980–81:																
Public	1,836	2,085	1,855	1,665	560	766	585	355	660	685	633	707	616	634	637	603
Nonpublic . .	3,985	4,631	3,803	2,989	2,646	3,100	2,539	1,713	704	790	671	684	635	741	593	592
1981–82:																
Public	1,858	2,115	1,884	1,705	570	784	597	367	660	685	633	714	628	646	654	624
Nonpublic . .	4,052	4,704	3,868	3,034	2,706	3,196	2,598	1,750	704	790	671	684	642	748	599	600
1982–83:																
Public	1,879	2,146	1,913	1,746	579	803	609	378	660	685	633	722	640	658	671	646
Nonpublic . .	4,117	4,776	3,932	3,078	2,765	3,232	2,656	1,786	704	790	671	684	648	754	605	608
1983–84:																
Public	1,901	2,176	1,942	1,786	589	822	621	390	660	685	633	729	652	669	688	667
Nonpublic . .	4,182	4,850	3,996	3,122	2,824	3,299	2,715	1,822	704	790	671	684	654	761	610	616
1984–85:																
Public	1,922	2,207	1,971	1,827	598	841	633	402	660	685	633	737	664	681	705	688
Nonpublic . .	4,248	4,922	4,061	3,166	2,884	3,365	2,774	1,858	704	790	671	684	660	767	616	624

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[1] Represents charges weighted by numbers of full-time degree-credit students for 1964–65: weighted by full-time resident students for 1966–67; by full-time undergraduate degree-credit students for 1968–69; by total full-time students for 1971–72; and by full-time equivalent resident degree-credit students for 1973–74. Publicly controlled 2-year institutions which reported a zero tuition charge are included in tuition calculations. Institutions which did not offer board or room are not included in calculations of average board or room charges.

Charges shown in table 45 in current dollars were converted to 1974–75 constant dollars by application of the Consumer Price Index. (See constant dollar index, appendix B, table B-8.)

[2] Interpolated.

[3] Estimated.

[4] Decreases in charges for board during the base period, in constant 1974–75 dollars, are frozen at the 1974–75 level.

For further methodological details, see appendix A, table A-5.

NOTE.—Data are for 50 States and the District of Columbia for all years.

SOURCES: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Higher Education Basic Student Charges*, 1964–65, 1966–67, 1968–69, 1971–72, and 1973–74, and (2) *Opening Fall Enrollment in Higher Education*, 1964, 1966, 1968, 1971, and 1973.

Table 45.—Estimated average charges (current dollars) per full-time undergraduate resident degree-credit student in institutions of higher education, by institutional type and control: United States, 1964–65 to 1975–76

(Charges are for the academic year and in current unadjusted dollars)

Year and control	Total tuition, board, and room				Tuition and required fees				Board (7-day basis)				Dormitory rooms			
	All	University	Other 4-year	2-year	All	University	Other 4-year	2-year	All	University	Other 4-year	2-year	All	University	Other 4-year	2-year
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1964–65:																
Public	$950	$1,051	$867	$638	$243	$298	$224	$99	$436	$462	$402	$361	$271	$291	$241	$178
Nonpublic ..	1,907	2,202	1,810	1,455	1,088	1,297	1,023	702	488	515	479	464	331	390	308	289
1965–66:¹																
Public	983	1,105	902	670	257	327	240	109	445	473	408	367	281	305	254	194
Nonpublic ..	2,005	2,316	1,897	1,557	1,154	1,369	1,086	768	495	529	482	473	356	418	329	316
1966–67:																
Public	1,026	1,171	947	710	275	360	259	121	457	490	417	376	294	321	271	213
Nonpublic ..	2,124	2,456	2,007	1,679	1,233	1,456	1,162	845	506	548	490	487	385	452	355	347
1967–68:¹																
Public	1,064	1,199	997	788	283	366	268	143	468	496	437	402	313	337	292	243
Nonpublic ..	2,204	2,545	2,104	1,763	1,297	1,534	1,237	893	516	556	501	504	391	455	366	366
1968–69:																
Public	1,117	1,245	1,063	882	295	377	281	170	485	509	464	435	337	359	318	278
Nonpublic ..	2,321	2,673	2,237	1,876	1,383	1,638	1,335	956	534	572	520	529	404	463	382	391
1969–70:¹																
Public	1,205	1,362	1,137	952	324	427	307	179	511	540	483	465	370	395	347	308
Nonpublic ..	2,533	2,919	2,420	1,993	1,534	1,809	1,469	1,034	562	607	543	546	437	503	408	413
1970–71:¹																
Public	1,288	1,478	1,209	1,017	352	478	333	188	534	568	500	492	402	432	376	339
Nonpublic ..	2,740	3,163	2,598	2,104	1,685	1,981	1,603	1,110	586	640	562	560	469	542	433	434

1971–72:																
Public	1,357	1,579	1,263	1,073	376	526	354	192	551	590	509	515	430	463	400	366
Nonpublic ..	2,917	3,375	2,748	2,186	1,820	2,133	1,721	1,172	603	666	573	565	494	576	454	449
1972–73:[1]																
Public	1,406	1,598	1,341	1,128	400	536	392	213	562	593	527	537	444	469	422	378
Nonpublic ..	2,979	3,460	2,820	2,248	1,869	2,199	1,775	1,213	608	674	560	580	502	587	465	456
1973–74:																
Public	1,524	1,6[illegible]	1,4[illegible]2	1,242	[2]445	571	453	[2]246	599	622	573	588	480	498	466	408
Nonpublic ..	3,184	3,715	3,030	2,422	2,009	2,373	1,917	1,315	642	716	614	624	533	626	499	[illegible]33
1974–75:[1]																
Public	1,708	1,903	1,682	1,420	503	653	515	285	660	685	633	661	545	565	534	474
Nonpublic ..	3,592	4,193	3,419	2,724	2,290	2,701	2,188	1,496	704	790	671	684	598	702	560	544
PROJECTED																
1975–76:[1]																
Public	1,882	2,104	1,863	1,589	558	731	574	322	718	746	689	727	606	627	600	540
Nonpublic ..	3,981	4,644	3,789	3,012	2,558	3,013	2,444	1,667	766	860	730	744	657	771	615	601

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[1] Data for 1965–66, 1967–68, 1969–70, 1972–73, and 1974–75 through 1975–76 estimated by applying the Consumer Price Index to the data in table 44. (See constant-dollar index, appendix B, table B-9.)

[2] Estimated. For further methodological details, see appendix A, table A-5.

SOURCES: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Higher Education Basic Student Charges*, 1964–65, 1966–67, 1968–69, 1971–72, and 1973–74, and (2) *Opening Fall Enrollment in Higher Education*, 1964, 1966, 1968, 1971, and 1973.

APPENDIX A

General Methodology

Estimation Methods

Classification of Degrees by Field of Study

Changes in Degree-Level Definitions

Glossary

General Methodology

The 1975 projections of educational data by the National Center for Education Statistics are based on reports of regular elementary and secondary day schools, both public and private, and of accredited institutions of higher education listed in the *Education Directory* of the National Center for Education Statistics.[1] The projections include enrollments at all levels, high school graduates, teacher and faculty demand, and expenditures in elementary and secondary schools and in institutions of higher education. Of these projections, those based directly on population were for: the number of children attending independent nursery and kindergarten schools, those attending the first grade of regular public schools, enrollments in higher education, and high school graduates. The others, with the exception of enrollment in grades 2 through 12 of the public schools, degrees by level, and degrees by field, were based on enrollments. Enrollments in grades 2 through 12 of public schools were based on grade retention rates. (Retention rates could not be used for projecting higher education enrollments because the data on these enrollments have not been collected by year of enrollment.) Degrees by field were based on enrollments and the distribution of total degrees by field.

The population averaging 18 years of age was chosen for projecting both high school graduates and first-time college enrollment. This age group gave a smoother fit when correlated with these data than could be obtained with other age groups. For projecting first-grade enrollments, the population aged 6 years was used.

The population aged 18-21 years was used for projecting college enrollments in both degree-credit and non-degree-credit courses. For estimating and projecting degrees, enrollments were primarily used. Bachelor's degrees were based on first-time degree-credit enrollment 4 years earlier. Master's degrees were based on the average first-year enrollment for advanced degrees 1 and 2 years earlier. Doctor's degrees were based on the average first-year enrollment for advanced degrees 7 and 8 years earlier. The estimate of a 7- and 8-year average time lapse between first-year enrollment for advanced degrees and doctor's degrees was made on the basis of unpublished data from the National Science Foundation.[2]

For making the projections, regression methods were used wherever a trend could be established. Where no consistent series was available or the data were too irregular to establish a trend, a constant based on the latest observation or an average of the last two or three observations was used.

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[1] U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Education Directory, 1974–75, Higher Education* (Washington, D.C.: U.S. Government Printing Office, 1975).

[2] National Science Foundation, Science Education Studies Group, unpublished analysis.

For some projections—such as graduate enrollments, enrollments in institutions of higher education by full-time and part-time attendance, and non-degree-credit enrollments—relationships had to be obtained from a different series of data and transferred to the opening fall higher education enrollment series. The latter series is current and has been reasonably consistent in the past, although prior to 1969 it lacked some detailed characteristics which are required by educators for decisionmaking. For the trend, observations in the 11 most recent years were used, and these were extrapolated for 10 years into the future. The 11-year timespan was considered better than a longer timespan because of the rapid changes in economic and social conditions and the improvement in the available statistics in recent years.

Straight lines and logistic growth curves, fitted by the least squares technique to a ratio (for example, of enrollment to population) as the dependent variable and time in years as the independent variable, were primarily used for projecting.

Logistic growth curves of the form

$$y' = \frac{K}{1+e^{-(a+bt)}}$$

were used when it was decided that continued straight-line growth would be unrealistic. Since the logistic growth curve is asymptotic (has an upper limit) at the point K, an upper limit must be selected. In many cases, the selection of an asymptote is limited by the nature of the statistic itself (no more than 100 percent of the 5-year-olds can be enrolled) or by consideration of external factors (it is extremely unlikely that the money required to support a 10-to-1 pupil-teacher ratio nationally will be available during the next 10 years). However, in some cases the selection of an asymptote is somewhat arbitrary.

Logistic growth curves are fitted by making the transformation

$$z' = \ln\frac{y'}{K-y'}$$

and then fitting a straight line to the z values. It should be noted that the standard error is in terms of the z values, not the y values.

For both the straight line and the logistic growth curve, the fitted curve often lies considerably above or below the last observed point, resulting in an unusual rise or drop from the last actual observation. To avoid this and give face validity to the projections, the fitted curve was used only to establish the last point, and a new curve was drawn through the last observed ratio and the end point on the fitted curve. (In this case, the fitted equation is used only to establish the ratio at the end of the 10-year span.)

For each major area (enrollments, degrees, teachers, and expenditures), the tables that follow outline the equations and constants that were used; the standard error and index of determination, when appropriate; and the adjusted equations, if used. Footnotes explain the meaning of the variables and constants used for estimating.

The tables are followed by sections which explain the methods used in estimating missing data of the past 11 years, define the meaning of terms as used by the National Center for Education Statistics in requesting data, and outline the classification of summarized degree data.

Table A-1.—Methodology (Chapter II)

Item	Text table number	Projection method					
			Trend				
		Constant	Least squares equation (y=percent; t=year; 1964=1)[1]	Index of determination	Standard error	Adjusted equation[2]	Other
Fall enrollment (independent public kindergarten and nursery schools)	2	...	....	...	...	....	(3)
3 years old[4]	...	...	$y'=0.40+0.40t$	0.94	0.37	$y'=1.11+0.37t$	
4 years old[5]	...	...	$y'=7.42+0.82t$	.94	.75	$y'=5.54+0.90t$	
5 years old[6]	...	...	$y'=83/[1+e^{-(0.22+0.11t)}]$	.98	.057	$y'=83/[1+e^{-(0.16+0.11t)}]$	
6 years old[7]	...	...	$y'=2.46+0.21t$	.77	.39	$y'=1.75+0.24t$	
Fall enrollment (independent nonpublic kindergarten and nursery schools)[3]	2	...	....	...	...	....	(8)
3 years old[9]	...	...	$y'=1.50+1.06t$	.94	.91	$y'=4.46+0.93t$	
4 years old[10]	...	...	$y'=4.91+1.44t$	.98	.76	$y'=7.81+1.31t$	
5 years old[11]	...	12.03					
6 years old[12]	...	0.35					
Fall enrollment (regular public day schools)	3						
kindergarten[13]	...	88.4					
Grade 1[14]	...	94.4					
Grade 2[15]	...	94.9					
Grade 3[16]	...	98.8					
Grade 4[17]	...	99.1					
Grade 5[18]	...	99.6					
Grade 6[19]	...	99.8					
Grade 7[20]	...	...	$y'_7(t)=y'_6(t-1)+0.036C(t-1)$				
Grade 8[21]	...	98.8					
Grade 9[22]	...	...	$y'_9(t)=y'_8(t-1)+0.052C(t-1)$				
Grade 10[23]	...	96.9					
Grade 11[24]	...	91.4					
Grade 12[25]	...	90.1					
Elementary ungraded[26]	...	...	$y'=0.81+0.17t$	.93	.16	$y'=0.33+0.19t$	
Secondary ungraded[27]	...	...	$y'=1.02+0.12t$	.87	.16	$y'=0.70+0.14t$	
Postgraduate[28]	...	15,000					
Organizational level[29]	4	62.9					
Fall enrollment (regular nonpublic day schools)	3, 4						
Grades kindergarten to 8	...	...	....	...	...	....	(30)
Grades 9 to 12	...	...	....	...	...	....	(31)

See footnotes at end of table.

Table A-1.—Methodology (Chapter II)—Continued

Item	Text table number	Projection method					
		Constant	Trend				Other
			Least squares equation (y=percent; t=year; 1964=1)[1]	Index of determination	Standard error	Adjusted equation[2]	
Degree-credit fall enrollment	6-8, 13, 17-19						
Men							
Full-time undergraduate and unclassified[32]	...	35.2					
Total undergraduate and unclassified[33]	...	...	$y'=50/[1-e^{-(1.000+0.030t)}]$	0.88	0.026	$y'=50/[1-e^{-(1.063+0.027t)}]$	
Public 4-year institutions	...	...	...	...	...	...	(34)
Private 4-year institutions[35]	...	...	$y'=10/[1-e^{-(0.459+0.022t)}]$	.99	.0066	$y'=10/[1-e^{-(0.460+0.023t)}]$	
Public 2-year institutions	...	...	...	...	...	...	(36)
Private 2-year institutions[37]	1.0						
Full-time graduate[38]	...	...	$y'=10.81+0.15t$	.94	.088	$y'=10.87+0.15t$	
Total graduate[39]	...	41.6					
Public 4-year institutions[40]	...	...	$y'=66.33+0.38t$	.97	.15	$y'=66.14+0.39t$	
Private 4-year institutions	...	...	...	...	...	...	(41)
Full-time first-professional[42]	...	...	$y'=250/[1+e^{(0.20-0.17t)}]$	.97	.068	$y'=250/[1+e^{(0.30-0.18t)}]$	
Total first-professional	...	...	...	...	...	...	(43)
Public 4-year institutions[44]	43.3						
Private 4-year institutions[44]	56.7						
Full-time undergraduate and unclassified							
Public 4-year institutions[45]	78.9						
Private 4-year institutions[46]	...	...	$y'=80.86-0.21t$	.53	.47	$y'=80.40-0.19t$	
Public 2-year institutions[46]	...	...	$y'=30/[1-e^{-(0.632+0.045t)}]$	.82	.049	$y'=30/[1-e^{-(0.759+0.037t)}]$	
Private 2-year institutions[46]	...	...	$y'=50/[1-e^{-(0.850+0.039t)}]$	.77	.051	$y'=50/[1-e^{-(0.983+0.032t)}]$	
Full-time graduate							
Public 4-year institutions[47]	41.6						
Private 4-year institutions	...	...	...	...	...	...	(48)
Part-time first-professional							
Public 4-year institutions[49]	3,000						
Private 4-year institutions[49]	11,000						
Women							
Full-time undergraduate and unclassified[32]	...	28.6					
Total undergraduate and unclassified[33]	...	...	$y'=50/[1-e^{-(1.056+0.045t)}]$	.85	.044	$y'=50/[1-e^{-(1.165+0.038t)}]$	
Public 4-year institutions[35]	...	...	$y'=35/[1-e^{-(1.005+0.026t)}]$	.87	.024	$y'=35/[1-e^{-(1.045+0.024t)}]$	
Private 4-year institutions[35]	...	...	$y'=10/[1-e^{-(0.490+0.022t)}]$	.98	.0081	$y'=10/[1-e^{-(0.499+0.022t)}]$	
Public 2-year institutions	...	...	...	...	...	...	(36)
Private 2-year institutions[37]	...	1.0					

Table A-1.--Methodology (Chapter II)--Continued

Item	Text table number	Projection method					
		Constant	Trend				Other
			Least squares equation (y=percent; t=year; 1964=1)[1]	Index of determination	Standard error	Adjusted equation[2]	
Full-time graduate[38]	...	...	$y'=6.00+0.24t$	0.78	0.30	$y'=6.57+0.20t$	
Total graduate[39]	...	28.8					
Public 4-year institutions[50]	...	75.5					
Private 4-year institutions[50]	...	24.5					
Full-time first-professional[42]	...	...	$y'=80/[1+e^{(2.27-0.28t)}]$	.92	.20	$y'=80/[1+e^{(1.98-0.26t)}]$	
Total first-professional[51]	...	90.0					
Public 4-year institutions[44]	...	48.8					
Private 4-year institutions[44]	...	51.2					
Full-time undergraduate and unclassified							
Public 4-year institutions[46]	...	...	$y'=79.76-0.36t$	.64	.65	$y'=78.40-0.29t$	
Private 4-year institutions[46]	...	...	$y'=82.21-0.49t$	.84	.51	$y'=81.29-0.44t$	
Public 2-year institutions[46]	...	...	$y'=26/[1-e^{-(0.637+0.066t)}]$	.76	.073	$y'=26/[1-e^{-(0.816+0.044t)}]$	
Private 2-year institutions[46]	...	...	$y'=85.06-1.02t$	.93	.64	$y'=84.82-1.00t$	
Full-time graduate							
Public 4-year institutions	...	...	...	...	...	...	(52)
Private 4-year institutions[53]	...	34.9					
Full-time first-professional							
Public 4-year institutions[54]	...	90.0					
Private 4-year institutions[54]	...	90.0					
Non-degree-credit fall enrollment	9-11						
Men[55]	...	...	$y'=2.85+0.43t$	.92	.46	$y'=3.89+0.30t$	
Public 4-year institutions[56]	...	4.6					
Private 4-year institutions[56]	...	2.3					
Public 2-year institutions[56]	...	92.0					
Private 2-year institutions[56]	...	1.1					
Women[55]	...	...	$y'=1.05+0.47t$	.88	.59	$y'=2.43+0.40t$	
Public 4-year institutions[56]	...	5.0					
Private 4-year institutions[56]	...	2.2					
Public 2-year institutions[56]	...	90.0					
Private 2-year institutions[56]	...	2.8					
Full-time non-degree-credit fall enrollment	9-11						
Men[57]	...	47.4					
Women[57]	...	44.4					
Men, 4-year institutions[58]	...	9.7					
Women, 4-year institutions[59]	...	11.1					

Table A-1.—Methodology (Chapter II)—Continued

		Projection method					
			Trend				
Item	Text table number	Constant	Least squares equation (y=percent; t=year; 1964=1)[1]	Index of determ-ination	Stand-ard error	Adjusted equation[2]	Other
Men, public institutions[60]	...	94.8					
Women, public institutions[61]	...	90.9					
Full-time-equivalent degree-credit fall enrollment[62]	12						
Public institutions	...	37.3					
Private institutions	...	37.3					
Full-time-equivalent non-degree-credit fall enrollment[63]	12						
Public institutions	...	36.8					
Private institutions	...	36.8					
First-time degree-credit fall enrollment	14-16						
Men							
Full-time[64]	...	35.6					
Total[65]	...	...	$y'=65/[1-e^{-(1.509+0.039t)}]$	0.89	.033	$y'=65/[1-e^{-(1.582+0.035t)}]$	
Public 4-year institutions[66]	...	...	$y'=40.86-0.26t$	.43	.72	$y'=42.32-0.35t$	
Private 4-year institutions[66]	...	...	$y'=22.64-0.29t$	.76	.38	$y'=22.08-0.25t$	
Public 2-year institutions	...	...	...	...	...	...	(67)
Private 2-year institutions[66]	...	...	$y'=1/[1-e^{-(0.361+0.039t)}]$	.82	.043	$y'=1/[1-e^{-(0.258+0.045t)}]$	
Full-time							
Public 4-year institutions[68]	89.2						
Private 4-year institutions[68]	90.9						
Public 2-year institutions	...	...	...	...	...	...	(69)
Private 2-year institutions[68]	77.3						
Women							
Full-time[64]	...	32.0					
Total[65]	...	...	$y'=65/[1-e^{-(1.548+0.067t)}]$	.92	.047	$y'=65/[1-e^{-(1.655+0.060t)}]$	
Public 4-year institutions[66]	...	...	$y'=45.26-0.66t$	.78	.84	$y'=46.72-0.75t$	
Private 4-year institutions[66]	...	...	$y'=23.26-0.42t$	.94	.24	$y'=22.80-0.40t$	
Public 2-year institutions	...	...	...	...	...	...	(67)
Private 2-year institutions[66]	...	...	$y'=1/[1-e^{-(0.245+0.036t)}]$	.96	.013	$y'=1/[1-e^{-(0.272+0.034t)}]$	
Full-time							
Public 4-year institutions[68]	...	86.0					
Private 4-year institutions[68]	...	89.8					
Public 2-year institutions	...	...	...	...	...	...	(69)
Private 2-year institutions[68]	...	86.4					

[1] If a computer is not available, tables of exponential functions, which are found in most books of mathematical tables, may be used to simplify computations of projected values from logistical growth curves.

[2] Unless otherwise noted, adjusted by relocating curve through last observed point and 1984 point of fitted curve.

[3] Total public kindergarten and nursery school enrollment less kindergarten enrollment in regular public day schools.

[4] y=percent 3-year-olds enrolled in public kindergarten and nursery schools is of population aged 3 years.

[5] y=percent 4-year-olds enrolled in public kindergarten and nursery schools is of population aged 4 years.

[6] y=percent 5-year-olds enrolled in public kindergarten and nursery schools is of population aged 5 years.

[7] y=percent 6-year-olds enrolled in public kindergarten and nursery schools is of population aged 6 years.

[8] Total nonpublic kindergarten and nursery school enrollment less kindergarten enrollment in regular nonpublic day schools.

[9] y=percent 3-year-olds enrolled in private kindergarten and nursery schools is of population aged 3 years.

[10] y=percent 4-year-olds enrolled in private kindergarten and nursery schools is of population aged 4 years.

[11] Constant=percent in 1974 that 5-year-olds enrolled in private kindergartens and nursery schools were of population aged 5 years.

[12] Constant=percent in 1974 that 6-year-olds enrolled in private kindergartens and nursery schools were of population aged 6 years.

[13] y'=percent in 1974 that regular public kindergarten and nursery enrollment was of total public kindergarten and nursery enrollment.

[14] Constant=percent in 1974 that 1st-grade enrollment was of population aged 6 years.

[15] Constant=percent in 1974 that grade 2 was of grade 1 in preceding year.

[16] Constant=percent in 1974 that grade 3 was of grade 2 in preceding year.

[17] Constant=percent grade 4 in 1974 was of grade 3 in preceding year.

[18] Constant=percent grade 5 in 1974 was of grade 4 in preceding year.

[19] Constant=percent grade 6 in 1974 was of grade 5 in preceding year.

[20] $y_7(t)$=enrollment in grade 7 in year t; $y_6(t-1)$=enrollment in grade 6 in year t-1; C(t-1)=enrollment in grades K–8 of Catholic schools in year t-1. For projections of enrollments in grades K–8 of Catholic schools, see footnote 7, part 5, table 3.

[21] Constant=percent grade 8 in 1974 was of grade 7 in preceding year.

[22] $y_9(t)$=enrollment in grade 9 in year t; $y_8(t-1)$=enrollment in grade 8 in year t-1; C(t-1)=enrollment in grades K–8 of Catholic schools in year t-1. For projections of enrollment in grades K–8 of Catholic schools, see footnote 7, part 5, table 3.

[23] Constant=percent grade 10 in 1974 was of grade 9 in preceding year.

[24] Constant=percent grade 11 in 1974 was of grade 10 in preceding year.

[25] Constant=percent grade 12 in 1974 was of grade 11 in preceding year.

[26] y=percent elementary ungraded enrollment is of population aged 5 to 13.

[27] y=percent secondary ungraded enrollment is of population aged 14 to 17.

[28] Constant=postgraduate enrollment in 1974.

[29] Constant=1974 percent that 7th and 8th grades organized as secondary were of total 7th and 8th grades.

[30] Approximations based on the assumption that the number of enrollments in grades K–8 in nonpublic schools will continue to decrease to 1979 and then remain constant.

[31] Approximations based on the assumption that the number of enrollments in grades 9–12 in nonpublic schools will remain at the 1972 level through 1984.

[32] Constant=percent in 1974 that full-time undergraduate and unclassified enrollment was of population aged 18–21.

[33] y=percent that full-time undergraduate and unclassified enrollment is of total undergraduate and unclassified enrollment.

[34] It was assumed that the percentage that undergraduate and unclassified enrollment in public 4-year institutions is of total undergraduate and unclassified enrollment would decrease 0.1 percent per year through 1984.

[35] y=percent that undergraduate and unclassified enrollment in this type and control of institutions is of total undergraduate and unclassified enrollment.

[36] 100 percent less the percentage of undergraduate and unclassified enrollment in the three other categories of institutions.

[37] Constant=percent that undergraduate and unclassified enrollment in private 2-year institutions was of total undergraduate and unclassified enrollment in 1974.

[38] y=percent that full-time graduate enrollment is of full-time undergraduate and unclassified enrollment in 4-year institutions.

[39] Constant=percent in 1974 that full-time graduate enrollment was of total graduate enrollment.

[40] y=percent that graduate enrollment in public 4-year institutions is of total graduate enrollment.

[41] 100 percent less the percentage of graduate enrollment in public 4-year institutions.

[42] y=full-time first-professional enrollment in thousands.

[43] Full-time first-professional enrollment plus 15,000, the part-time first-professional enrollment in 1974.

[44] Constant=percent in 1974 that first-professional enrollment in this type of institution was of total first-professional enrollment.

[45] Constant=percent in 1974 that full-time undergraduate and unclassified enrollment in public 4-year institutions was of total undergraduate and unclassified enrollment in these same institutions.

[46] y=percent that full-time undergraduate and unclassified enrollment in this type and control of institution is of total undergraduate and unclassified enrollment in these same institutions.

[47] Constant=percent in 1974 that full-time graduate enrollment in public 4-year institutions was of total graduate enrollment in public 4-year institutions.

[48] Total full-time graduate enrollment less full-time graduate enrollment in public 4-year institutions.

[49] Constant=part-time first-professional enrollment in this type and control of institution.

[50] Constant=percent in 1974 that graduate enrollment in this type and control of institution was of total graduate enrollment.

[51] Constant=percent in 1974 that full-time first-professional enrollment was of total first-professional enrollment.

[52] Total full-time graduate enrollment less full-time graduate enrollment in private 4-year institutions.

[53] Constant=percent in 1974 that full-time graduate enrollment in private 4-year institutions was of total graduate enrollment in private 4-year institutions.

[54] Constant=percent in 1974 that full-time first-professional enrollment in this type and control of institution was of total first-professional enrollment in these institutions.

[55] y=percent opening fall non-degree-credit enrollment is of population aged 18–21 years.

[56] Constant=percent in 1974 that non-degree-credit enrollment in this category was of total non-degree-credit enrollment.

[57] Constant=percent in 1974 that full-time non-degree-credit enrollment was of total non-degree-credit enrollment.

[58] Constant=percent in 1974 that men full-time enrollment in 4-year institutions was of men full-time enrollment in all institutions.

[59] Constant=percent in 1974 that women full-time enrollment in 4-year institutions was of women full-time enrollment in all institutions.

[60] Constant=percent in 1974 that men full-time enrollment in public institutions was of men full-time enrollment in all institutions.

[61] Constant=percent in 1974 that women full-time enrollment in public institutions was of women full-time enrollment in all institutions.

[62] Constant=percent in 1974 that full-time equivalent of part-time degree-credit enrollment was of part-time degree-credit enrollment.

[63] Constant=percent in 1974 that full-time equivalent of part-time non-degree-credit enrollment was of part-time non-degree-credit enrollment.

[64] Constant=percent in 1974 that full-time first-time opening fall degree-credit enrollment was of population aged 18 at nearest birthday.

[65] y=percent that full-time first-time enrollment is of total first-time enrollment.

[66] y=percent in 1974 that first-time degree-credit enrollment in this category is of total first-time degree-credit enrollment.

[67] 100 percent less the percentage of enrollment in the three other categories of institutions.

[68] Constant=percent in 1974 that full-time first-time degree-credit enrollment in this category was of total first-time degree-credit enrollment in this category.

[69] Total full-time first-time degree-credit enrollment less the full-time first-time degree-credit enrollment in the three other categories of institutions.

Table A-2.—Methodology (Chapter III)

Item	Text table number	Projection method					
		Constant	Trend				Other
			Least squares equation (y=percent; t=year; 1963–64=1)[1]	Index of determination	Standard error	Adjusted equation[2]	
High school graduates:	20						
Public[3]							
Men	...	65.6					
Women	...	68.6					
Nonpublic[4]	...	[5]48.1					
Bachelor's degrees conferred on men[6]	21		$y'=49.10+0.43t$	0.56	1.33	$y'=49.81+0.35t$	
Selected fields[7]	23						
Social sciences	...	.....	.....	....	....	.....	(8)
Psychology[9]	...		$y'=2.71+0.21t$	0.98	0.091	$y'=2.97+0.17t$	
Public affairs and services	...	.....	.....	....	....	.....	(10)
Library sciences[11]	...	0.02					
Architecture and environmental design	...	.....	.....	....	....	.....	(12)
Fine and applied arts[11]	...	3.00					
Foreign languages[9]	...	.....	$y'=0.5/[1-e^{-(0.285+0.046t)}]$	0.76	0.090	$y'=0.5/[1-e^{-(0.447+0.039t)}]$	
Communications	...	.....	.....	....	....	.....	(10)
Letters[9]	...	.....	.....	....	....	.....	(8)
Mathematics and statistics[9]	...	.....	$y'=1.5/[1-e^{-(0.235+0.054t)}]$	0.83	0.085	$y'=1.5/[1-e^{-(0.503+0.042t)}]$	
Computer and information sciences[9]	...	.....	$y'=-0.203+0.083t$	0.92	0.062	$y'=0.090+0.060t$	
Engineering	...	.....	.....	....	....	.....	(13)
Physical science[11]	...	3.35					
Biological sciences[11]	...	6.30					
Agriculture and natural resources	...	.....	.....	....	....	.....	(14)
Health professions	...	.....	.....	....	....	.....	(12)
Accounting	...	.....	.....	....	....	.....	(15)
Other business and management[11]	...	17.09					
Education	...	.....	.....	....	....	.....	(16)
Other[11]	...	3.76					

See footnotes at end of table

Table A-2.—Methodology (Chapter III) – Continued

Item	Text table number	Projection method					
		Constant	Trend				Other
			Least squares equation (y=percent; t=year; 1963–64=1)[1]	Index of determination	Standard error	Adjusted equation[2]	
Bachelor's degrees conferred on women[6]	21		$y'=50.77+0.30t$	0.46	1.13	$y'=48.75+0.35t$	
Selected fields[7]	23						
Social sciences	...	.....	.....	....	....	.....	(8)
Psychology[9]	...	.....	$y'=2.01+0.35t$	0.97	0.21	$y'=3.58+0.24t$	(15)
Public affairs and services[9]	...	.....	$y'=0.416+0.132t$	0.53	0.436	$y'=1.836+0.057t$	
Library sciences[11]	...	0.26					
Architectural and environmental design	...	.....	.....	....	....	.....	(14)
Fine and applied arts[11]	...	5.72					
Foreign languages[9]	...	.....	$y'=5.141-0.130t$	0.50	0.460	$y'=4.262-0.078t$	
Communications	...	.....	.....	....	....	.....	(12)
Letters[9]	...	.....	$y'=13.690-0.276t$	0.47	1.029	$y'=9.939-0.065t$	
Mathematics and statistics[9]	...	.....	$y'=3.350-0.092t$	0.63	0.247	$y'=2.690-0.053t$	
Computer and information sciences[9]	...	.....	$y'=-0.052+0.019t$	0.90	0.023	$y'=0.052+0.013t$	
Engineering	...	.....	.....	....	....	.....	(17)
Physical sciences[11]	...	0.84					
Biological sciences[11]	...	3.61					
Agriculture and natural resources[9]	...	.....	$y'=-0.002+0.026t$	0.80	0.046	$y'=0.231+0.013t$	
Health professions	...	.....	.....	....	....	.....	(10)
Accounting[9]	...	.....	$y'=0.222+0.054t$	0.86	0.074	$y'=0.630+0.030t$	
Other business and management[9]	...	.....	$y'=1.684+0.091t$	0.77	0.171	$y'=2.668+0.038t$	
Education[9]	...	.....	$y'=41.49-0.74t$	0.79	1.36	$y'=38.10-0.51t$	
Other[11]	...	5.99					
Master's degrees conferred on men[18]	21	50.80					
Selected fields[7]	24						
Social sciences[19]	...	.....	$y'=10.096-0.132t$	0.52	0.444	$y'=9.003-0.070t$	
Psychology[19]	...	.....	$y'=1.741+0.051t$	0.67	0.126	$y'=2.267+0.023t$	

Public affairs and services[19]	...	.....	$y'=1.57+0.21t$	0.83	0.33	$y'=3.06+0.12t$	
Library sciences[19]	...	.....	$y'=0.858+0.018t$	0.39	0.078	$y'=1.060+0.007t$	
Architecture and environmental design[19]	...	.....	$y'=0.377+0.067t$	0.96	0.063	$y'=0.715+0.062t$	
Fine and applied arts[20]	...	2.74					
Foreign languages[19]	...	.....	$y'=0.5/[1-e^{-(0.246+0.042t)}]$	0.67	0.103	$y'=0.5/[1-e^{-(0.616+0.025t)}]$	
Communications	...	.....	.....	....	....	.....	(21)
Letters[19]	...	.....	$y'=4.270-0.068t$	0.80	0.196	$y'=3.801-0.041t$	
Mathematics and statistics[19]	...	.....	$y'=1/[1-e^{-(0.167+0.038t)}]$	0.90	0.045	$y'=1/[1-e^{-(0.277+0.033t)}]$	
Computer and information sciences[19]	...	.....	$y'=-0.11+0.14t$	0.96	0.098	$y'=-0.01+0.12t$	
Engineering[20]	...	9.52					
Physical sciences[19]	...	.....	$y'=2/[1-e^{-(0.356+0.049t)}]$	0.97	0.030	$y'=2/[1-e^{-(0.439+0.046t)}]$	
Biological sciences[20]	...	2.89					
Agriculture and natural resources[20]	...	1.67					
Health professions[19]	...	.....	$y'=1.515+0.061t$	0.56	0.189	$y'=2.097+0.029t$	
Accounting[22]	...	.....	.....	....	....	.....	(22)
Other business and management[20]	...	18.37					
Education[20]	...	28.51					
Other[20]	...	3.32					
Master's degrees conferred on women[18]	21	49.70					
Selected fields[7]	24						
Social sciences[19]	...	.....	$y'=6.065-0.098t$	0.48	0.354	$y'=4.996-0.041t$	
Psychology[19]	...	.....	$y'=1.616+0.037t$	0.34	0.178	$y'=2.042+0.014t$	
Public affairs and services	...	.....	.....	....	....	.....	(21)
Library sciences[19]	...	.....	$y'=6.608-0.078t$	0.35	0.375	$y'=5.606-0.027t$	
Architecture and environmental design[19]	...	.....	$y'=-0.025+0.035t$	0.93	0.033	$y'=0.157+0.023t$	
Fine and applied arts[20]	...	3.08					
Foreign languages[19]	...	.....	$y'=4.364-0.149t$	0.55	0.473	$y'=3.022-0.075t$	
Communications	...	.....	.....	....	....	.....	(21)
Letters[19]	...	.....	$y'=9.23-23t$	0.61	0.64	$y'=6.91-0.11t$	
Mathematics and statistics[19]	...	.....	$y'=0.5/[1-e^{-(0.191+0.023t)}]$	0.74	0.048	$y'=0.5/[1-e^{-(0.323+0.017t)}]$	
Computer and information sciences[19]	...	.....	$y'=-0.043+0.027t$	0.96	0.020	$y'=0.026+0.020t$	
Engineering[19]	...	.....	$y'=0.074+0.019t$	0.92	0.020	$y'=0.152+0.013t$	
Physical sciences[19]	...	.....	$y'=0.36/[1-e^{-(0.297+0.028t)}]$	0.86	0.040	$y'=0.36/[1-e^{-(0.403+0.023t)}]$	
Biological sciences[19]	...	.....	$y'=1/[1-e^{-(0.392+0.030t)}]$	0.86	0.068	$y'=1/[1-e^{-(0.565+0.031t)}]$	
Agriculture and natural resources[19]	...	.....	$y'=0.113+0.009t$	0.71	0.020	$y'=0.180+0.006t$	
Health professions[19]	...	.....	$y'=2.18+0.19t$	0.72	0.42	$y'=3.70+0.10t$	

Table A-2.—Methodology (Chapter III) – Continued

Item	Text table number	Projection method					
		Constant	Trend				Other
			Least squares equation (y=percent; t=year; 1963–64=1)[1]	Index of determination	Standard error	Adjusted equation[2]	
Accounting	...	.....	.....	....	....	.....	(21)
Other business and commerce[19]	...	.....	$y'=0.314+0.097t$	0.88	0.124	$y'=1.066+0.064t$	
Education[20]	...	56.42					
Other[20]	...	3.47					
Doctor's (except first-professional) degrees conferred on men[23]	21	.....	$y'=6/[1-e^{-(0.365+0.031t)}]$	0.76	0.043	$y'=t/[1-e^{-(0.446+0.026)}]$	
Selected fields[7]	25						
Social sciences[24]	...	12.62, 12.13					
Psychology[25]	...	25.41, 6.21					
Public affairs and services[25]	...	3.31, 1.37					
Library sciences[24]	...	2.53, 0.19					
Architecture and environmental design[26]	...	4.19, 0.67					
Fine and applied arts[27]	...	1.61					
Foreign languages[26]	...	13.94, 1.23					
Communications[27]	...	0.53					
Letters[27]	...	6.54					
Mathematics and statistics[25]	...	9.69, 2.18					
Computer and information sciences[25]	...	7.99, 1.22					
Engineering[25]	...	9.57, 9.18					
Physical sciences[25]	...	23.03, 9.86					
Biological sciences[28]	...	10.67	$y'=35.34-0.87t$	0.56	2.26	$y'=31.91-0.80t$	
Agriculture and natural resources[28]	...	2.98	$y'=33.76-1.68t$	0.70	2.34	$y'=31.96-1.33t$	
Health professions[25]	...	12.20, 2.77					
Accounting[25]	...	2.08, 0.30					
Other business and management[25]	...	1.94, 3.89					
Education[29]	...	10.00, 27.58					
Other[27]	...	3.52					

Doctor's (except first-professional) degrees conferred on women[30]	21	4.48					
Selected fields[7]	25						
Social sciences[24]	...	7.59, 9.04					
Psychology[24]	...	20.24, 12.78					
Public affairs and services[24]	...	1.05, 0.97					
Library sciences[27]	...	0.37					
Architecture and environmental design[31]	...	10					
Fine and applied arts	...	.....	.....	....	....	.....	(32)
Foreign languages[33]	...	2.66	$y'=5/[1-e^{-(0.470+0.090t)}]$	0.80	0.059	$y'=5/[1-e^{-(0.496+0.088t)}]$	
Communication[27]	...	0.46					
Letters[26]	...	8.63, 11.53					
Mathematics and statistics[25]	...	2.71, 0.88					
Computer and information sciences[31]	...	10					
Engineering[25]	...	16.00, 1.40					
Physical sciences[25]	...	11.62, 2.64					
Biological sciences[28]	...	7.93	$y'=10/[1-e^{-(0.540+0.072t)}]$	0.76	0.096	$y'=10/[1-e^{-(0.554+0.071t)}]$	
Agriculture and natural resources[24]	...	16.92, 1.05					
Health profession[25]	...	3.77, 3.97					
Accounting[31]	...	10					
Other business and management[25]	...	2.35, 1.55					
Education[34]	...	3.82, 38.62					
Other[35]	...	10.00, 3.19					
First-professional degrees conferred, total[36]	21	113.40					
Selected fields	26						
Medicine	...	.....	.....	....	....	.....	(37)
Dentistry	...	.....	.....	....	....	.....	(37)
Other health professions	...	.....	.....	....	....	.....	(37)
Law[38]	...	.....	$y'=85/[1+e^{(-0.74-0.13t)}]$	0.85	0.16	$y'=85/[1+e^{(-1.31-0.10t)}]$	
Theology and other[39]	...	5,450					
Women	21	.....	.....	....	....	.....	(40)
Medicine[41]	...	.....	$y'=30/[1+e^{(1.704-0.124t)}]$	0.83	0.24	$y'=30/[1+e^{(0.488-0.074t)}]$	
Dentistry	...	.....	.....	....	....	.....	(42)
Other health professions[41]	...	.....	$y'=0.89+0.68t$	0.79	1.53	$y'=9.29+0.33t$	
Law[43]	...	.....	$y'=30/[1+e^{(2.75-0.24t)}]$	0.88	0.33	$y'=30/[1+e^{(1.46-0.18t)}]$	
Theology and other[43]	...	.....	$y'=-0.47+0.59t$	0.75	1.37	$y'=5.22+0.33t$	
Men	21	.....	.....	....	....	.....	(44)

[1] If a computer is not available, tables of exponential functions, which are found in most books of mathematical tables, may be used to simplify the computation of a projected value from a logistic growth curve.

[2] Adjusted by relocating curve through last observed point and 1984–85 point of fitted curve.

[3] Constant=percent that public high school graduates were of population averaging 18 years of age for men and women separately.

[4] Assumes approximately no change in number of nonpublic high school graduates through 1984–85.

[5] Constant=percent that boys were of nonpublic high school graduates in 1964–65.

[6] y=percent that bachelor's degrees are of first-time degree-credit enrollment 4 years earlier.

[7] Projections of degrees by field of study are based primarily on the assumption that, for each field, the percentage that degrees in the field are of degrees in all fields will follow past trends. However, when the projected percentages for each field are summed over all fields, the sum for each projected year does not usually add to 100 percent. Therefore, for each year, the projected percentages for individual fields that are obtained from the equations in this table are prorated so that they add to 100 percent. Also, due to the new taxonomy now in use (1970–71 through 1973–74 data), there are new fields plus changes in some of the older fields which make it impossible to obtain meaningful trends. Therefore, in many cases somewhat arbitrary decisions must be made on the basis of the past few years of data.

[8] It was assumed that bachelor's degrees in this field would decrease by 0.10 percent of total bachelor's degrees each year through 1984–85.

[9] y=percent that bachelor's degrees in this field are of all bachelor's degrees.

[10] It was assumed that bachelor's degrees in this field would increase by 0.10 percent of total bachelor's degrees each year through 1984–85.

[11] Constant=percent in 1973–74 that bachelor's degrees in this field were of all bachelor's degrees.

[12] It was assumed that bachelor's degrees in this field would increase by 0.05 percent of total bachelor's degrees each year through 1984–85.

[13] Projections of bachelor's degrees in engineering through 1977–78 are based on data from the Engineers Joint Council on undergraduate engineering enrollment by year enrolled. Projections for 1978–79 through 1984–85 are primarily based on the assumption that the percentage that bachelor's degrees in engineering are of all bachelor's degrees will remain constant at the 1977–78 projected level of 10.62 percent through 1984–85.

[14] It was assumed that bachelor's degrees in this field would increase by 0.02 percent of total bachelor's degrees each year through 1984–85.

[15] Projections through 1978–79 are based on projections from the American Institute of Certified Public Accountants. Projections from 1979–80 through 1984–85 are based primarily on the assumption that the percentage that bachelor's degrees in accounting are of all bachelor's degrees will remain constant at the 1979–80 projected level of 5.97 percent through 1984–85.

[16] It was assumed that bachelor's degrees in the field would decrease by 0.05 percent of total bachelor's degrees each year through 1984–85.

[17] Projections of bachelor's degrees in engineering through 1977–78 are based on data from the Engineers Joint Council on undergraduate engineering enrollment by year enrolled. Projections for 1978–79 through 1984–85 are based primarily on the assumption that the percentage that engineering degrees are of all bachelor's degrees will increase 0.04 percent each year through 1984–85.

[18] Constant=percent that master's degrees in 1973–74 were of the estimated average first-year enrollment for advanced degrees 1 and 2 years earlier.

[19] y=percent that master's degrees in this field are of all master's degrees.

[20] Constant=percent in 1973–74 that master's degrees in this field were of all master's degrees in 1973–74.

[21] It was assumed that master's degrees in this field would increase by 0.02 percent of total master's degrees each year through 1984–85.

[22] It was assumed that master's degrees in this field would increase by 0.05 percent of total master's degrees each year through 1984–85.

[23] y=percent that doctor's degrees are of first-year enrollment for advanced degrees averaging 7 and 8 years earlier.

[24] First constant=percent or approximate percent that earned degrees in this field in 1973–74 were of first-year enrollment for advanced degrees in the same field 7 years earlier. This constant was used to determine the 1974–75 to 1979–80 projections. Second constant=percent that projected earned degrees in this field in 1979–80 are of total doctor's degrees in 1979–80. This constant was used to determine the 1980–81 to 1984–85 projections.

[25] First constant=percent or approximate percent that earned degrees in this field in 1973–74 were of first-year enrollment for advanced degrees in the same field 6 years earlier. This constant was used to determine the 1974–75 to 1978–79 projections. Second constant=percent that projected earned degrees in this field in 1978–79 are of total doctor's degrees in 1978–79. This constant was used to determine the 1979–80 to 1984–85 projections.

[26] First constant=percent or approximate percent that earned degrees in this field in 1973–74 were of first-year enrollment for advanced degrees in the same field 8 years earlier. This constant was used to determine the 1974–75 to 1980–81 projections. Second constant=percent that projected earned degrees in this field in 1980–81 are of total doctor's degrees in 1980–81. This constant was used to determine the 1981–82 to 1984–85 projections.

[27] Constant=percent in 1973–74 that doctor's degrees in this field were of all doctor's degrees.

[28] y=percent that earned degrees in this field are of first-year enrollment for advanced degrees in the same field 6 years earlier. These percents were used to obtain the projections for 1974–75 to 1978–79. Constant=percent that projected earned degrees in this field in 1978–79 are of total doctor's degrees in 1978–79. This constant was used to determine the 1979–80 to 1984–85 projections.

[29] First constant=percent that earned degrees in this field in 1973–74 were of first-year enrollment for advanced degrees in the same field 10 years earlier. This constant was used to determine the 1974–75 to 1982–83 projections. Second constant=percent that projected earned degrees in this field in 1982–83 are of total doctor's degrees in 1982–83. This constant was used to determine the projections for 1983–84 and 1984–85.

[30] Constant=percent in 1973–74 that doctor's degrees were of first-year enrollment for advanced degrees averaging 7 and 8 years earlier.

[31] Constant=number of doctor's degrees projected in this field through 1984–85.

[32] It was assumed that doctor's degrees in this field would decrease by 0.05 percent of total doctor's degrees each year through 1984–85.

[33] y=percent that earned doctor's degrees in this field are of first-year enrollment for advanced degrees in the same field 8 years earlier. These percentages were used to obtain the projections for 1974–75 through 1980–81. Constant=percent in 1980–81 that projected earned doctor's degrees in this field are of total doctor's degrees. This constant was used to determine the 1981–82 to 1984–85 projections.

[34] First constant=approximately the percent that earned degrees in this field in 1973–74 were of first-year enrollment for advanced degrees in the same field, 11 years earlier. This constant was used to determine the 1974–75 to 1983–84 projections. Second constant=percent that projected earned degrees in this field in 1983–84 are of total doctor's degrees in 1983–84. This constant was used to determine the 1984–85 projection.

[35] First constant=percent in 1973–74 that doctor's degrees in "other" fields were of first-year enrollment for advanced degrees in home economics 8 years earlier. This constant was used to obtain the projections from 1974–75 to 1980–81. Second constant=percent in 1980–81 that doctor's degrees in "other" fields are of all doctor's degrees in 1980–81. This constant was used to determine the 1981–82 to 1984–85 projections.

[36] Projections for 1974–75 to 1984–85 were obtained by summing the projected degrees of all the individual fields.

[37] These projections were made by the Health Resources Administration, Bureau of Health Manpower.

[38] y=percent that law degrees are of first-year law students 3 years earlier. Projections through 1984–85 are based on unpublished projections of first-year law students provided by the American Bar Association.

[39] Constant=number of first-professional degrees projected in this field through 1984–85.

[40] The total number of degrees granted to women was projected by summing the projected degrees granted to women in the individual fields.

[41] y=percent that first-professional degrees in this field granted to women are of all first-professional degrees in this field. This equation was used to project the percentage of women for 1977–78 through 1984–85. Projections for 1974–75 through 1976–77 are based on the percentage that women made up of first-year enrollment for advanced degrees in this field 4 years earlier.

[42] It was assumed that the percentage of first-professional degrees granted to women in dentistry would increase 0.20 percent, each year, 1977–78 through 1984–85. Projections for 1974–75 through 1976–77 are based on the percentage that women made up of first-year enrollment for advanced degrees in this field 4 years earlier.

[43] y=percent that first-professional degrees in this field granted to women are of all first-professional degrees in this field. This equation was used to project the percentage of women from 1975–76 to 1984–85. Projections for 1974–75 and 1975–76 are based on the percentage that women made up of first-year enrollment for advanced degrees in this field 3 years earlier.

[44] The number of degrees granted to men was projected as the difference between projections of total degrees and projections of degrees granted to women.

Table A-3.—Methodology (Chapter IV)

Item	Text table number	Projection method					
		Constant (percent)	Trend				Other
			Least squares equation (y=percent; t=year; 1964=1)[1]	Index of determination	Standard error	Adjusted equation[2]	
Classroom teachers in regular day schools	27						
Public elementary	...	...	....	...	...	....	(3)
Public secondary	...	...	....	...	...	....	(3)
Nonpublic elementary	...	...	....	...	...	....	(3)
Nonpublic secondary	...	...	....	...	...	....	(3)
Pupil-teacher ratios in regular elementary and secondary day schools	28						
Public elementary[4]	...	...	$y'=15/[1-e^{-(0.728+0.031t)}]$	.96	.023	$y'=15/[1-e^{-(0.759+0.029t)}]$	
Public secondary[4]	...	...	$y'=15/[1-e^{-(1.186+0.036t)}]$	.93	.034	$y'=15/[1-e^{-(1.255+0.033t)}]$	
Nonpublic elementary[4]	...	...	$y'=18/[1-e^{-(0.578+0.083t)}]$	.97	.048	$y'=18/[1-e^{-(0.615+0.081t)}]$	
Nonpublic secondary[5]	...	15.7					
Demand for classroom teachers in public regular day schools	29						
For enrollment increase	...	...	....	...	...	....	(6)
For teacher turnover[7]	...	8.0					
For reduction of pupil-teacher ratio	...	...	....	...	...	....	(8)
Demand for classroom teachers in nonpublic regular day schools	30						
For enrollment increase	...	...		...	...	....	(6)
For teacher turnover[9]	...	4.0					
For reduction of pupil-teacher ratio	...	...	....	...	...	....	(8)
Instructional staff in regular elementary and secondary day schools	31						
Public[10]	...	111.9					
Nonpublic	...	...	....	...	...	....	(11)
Total instructional staff for resident courses	32						
Public 4-year institutions[12]	...	14.9					
Private 4-year institutions[12]	...	12.5					
Public 2-year institutions[12]	...	23.0					
Private 2-year institutions[12]	...	16.1					

Instructor or above[13]	...	84.8					
Full-time[14]	...	76.6					
Junior instructional staff[15]	...	15.2					
Full-time[16]	...	9.1					
Full-time-equivalent instructional staff for resident courses	33						
Full-time equivalent of part time:							
Instructor or above[17]	...	31.0					
Junior instructional staff[18]	...	38.8					
Total demand for estimated full-time-equivalent Instructional staff in institutions of higher education	34						
Demand for additional instructional staff:							
For increased enrollment and changes of student staff ratio	...	...	....	...	...	....	(19)
For replacement[20]	...	6.0					

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[1] If a computer is not available, tables of exponential functions, which are found in most books of mathematical tables, may be used to simplify computations of projected values from logistical growth curves.

[2] Adjusted by relocating curve through last observed point and 1984 point on fitted curve.

[3] Projected enrollment (table 4) divided by projected pupil-teacher ratio (table 28) calculated separately for each type of school by control and level.

[4] y=ratio of number of pupils to number of teachers.

[5] Constant=estimated 1974 ratio of number of pupils to number of teachers.

[6] Total teacher demand in a given year less total teacher demand in the previous year less the number of teachers needed for pupil-teacher ratio changes.

[7] 8 percent of total teacher demand in each previous year.

[8] The enrollment divided by the pupil-teacher ratio of a given year less the same enrollment divided by the pupil-teacher ratio of the previous year.

[9] 4 percent of total teacher demand in each previous year.

[10] Constant=ratio in 1974 that instructional staff was to classroom teachers (staff-teacher ratio times projected classroom teachers=projected instructional staff).

[11] Number of instructional staff assumed same as number of classroom teachers.

[12] Constant=1972 ratio of total enrollment to instructional staff for resident courses.

[13] Constant=percent instructor or above was of the entire instructional staff in 1972.

[14] Constant=percent full-time instructor or above was of total instructor or above in 1972.

[15] Constant=percent junior instructional staff was of the entire instructional staff in 1972.

[16] Constant=percent full-time junior instructional staff was of total junior instructional staff in 1972.

[17] Constant=percent full-time equivalent of part-time instructor or above was of part-time instructor or above in 1972 in all institutions.

[18] Constant=percent full-time-equivalent junior instructional staff was of part-time junior instructional staff in 1972 in all institutions.

[19] Increase in total full-time equivalents employed over each previous year.

[20] Constant=percent of total full-time equivalents employed in previous year.

NOTE.–Sources of data and assumptions on which projections were based are given in text table footnotes.

Table A-4.—Methodology (Chapter V)

Item	Text table number	Projection method					
		Constant	Trend				Other
			Least squares equation (t=years; 1984–85=1)	Index of determination	Standard error	Adjusted equation	
Expenditures for education by elementary and secondary day schools	35,36						
Current expenditures:							
Public	.....	.....	.....	.....	.....	.....	(1)
Nonpublic	.....	.....	.....	.....	.....	.....	(2)
Capital Outlay:							
Public	.....	.....	.....	.....	.....	.....	(3)
Nonpublic	.....	.....	.....	.....	.....	.....	(4)
Interest:							
Public	.....	.....	.....	.....	.....	.....	(5)
Nonpublic	.....	.....	.....	.....	.....	.....	(6)
Expenditures for education by institutions of higher education	35, 36						
Current expenditures:							
Public	.....	.....	.....	.....	.....	.....	(7)
Nonpublic	.....	.....	.....	.....	.....	.....	(7)
Capital outlay:							
Public	.....	.....	.....	.....	.....	.....	(8)
Nonpublic	.....	.....	.....	.....	.....	.....	(8)
Current expenditures of public school systems	37						
Average daily attendance	.....	[9]92					
Current expenditure allocated to pupil costs							
Per pupil in average daily attendance:							
Total	.....	.....	$y'=\$1,500/[1+e^{(0.047-0.179t)}]$ [10]	0.93	$0.170	$y'=\$1,500/[1+e^{(0.643-0.207t)}]$	(11)
Current expenditures for all programs	.....	[12]1.04					
Expenditures for salaries of instructional staff in public elementary and secondary day schools	38						
Average annual salary:[13]	.....	.....	$y'=\$13,500/[1+e^{-(1.399+0.126t)}]$	0.65	$0.325	$y'=\$13,500/[1+e^{-(0.039+0.190t)}]$	
Total salary	.....	.....	.....	.....	.....	.....	(14)
Capital outlay (school year)	39	.....	$y'=\$8,317-\$285(t)$	(15)	(16)	.....	(16)

Expenditures for interest by public elementary and secondary schools	40	.....	y'=$1,229+$62(t)[17]	0.91	$66	y'=$991+$73(t)	
Expenditures from current funds and total expenditures by institutions of higher education	41, 43						
Expenditures for educational and general purposes:							
Student education (per student):							
Public	.....	.....	y'=$1,977+$86(t)	0.92	$70	y'=$1,987+$91(t)[18]	
Nonpublic	.....	.....	y'=$2,538+$144(t)	0.84	$97	y'=$2,463+$144(t)[18]	
Organized research (000's dollars) excluding federally funded R&D:							
Public	.....	.....	y'=$1,446,158+$47,877(t)	0.74	$74,703	y'=$1,444,058+$47,902(t)[19]	
Nonpublic	.....	.....	y'=$1,440,714−$46,714(t)	0.96	$27,166	y'=$1,328,367−$44,948(t)[19]	
Related activities (percent) excluding major public service:							
Public	.....	.....	y'=18.2−1.0(t)	0.90	.087	y'=17.8−1.0(t)[20]	
Nonpublic	.....	.....	y'=6.9+0.1(t)	0.48	.64	y'=6.6+3.2(t)[20]	
Expenditures for auxiliary enterprises (percent of student education):							
Public	.....	.....	y'=31.8−2.1(t)	0.91	1.67	y'=34.7−2.2(t)[20]	
Nonpublic	.....	.....	y'=37.4−1.8(t)	0.92	1.43	y'=39.8−1.9(t)[20]	
Expenditures for student aid (percent of student education):							
Public	.....	.....	y'=4.7+0.2(t)	0.44	0.46	y'=4.1+0.2(t)[20]	
Nonpublic	.....	.....	y'=10.7+0.2(t)	0.78	0.34	y'=10.1+0.2(t)[20]	
Expenditures for major public service (000's dollars):							
Public	.....	.....	y'=$706,676+$83,273(t)	0.99	$27,806	y'=$707,036+$83,256(t)[21]	
Nonpublic	.....	.....	y'=$773,863+$49,983(t)	0.84	$96,988	y'=$1,014,023+$36,976(t)[21]	
Capital outlay from current funds only (percent of total capital outlay):							
Public	.....	17.0[22]					
Nonpublic	.....	16.0[23]					
Capital outlay of institutions of higher education (millions of dollars):							
Public	.....	$2,368	NA	.....	.....	.....	23
Nonpublic	.....	$639	NA	.....	.....	.....	23

[1] See method detailed for table 37 in footnotes 9 to 12 of this table (A-4).

[2] Ratio of nonpublic school teachers to public school teachers times public school current expenditures.

[3] See method detailed for table 39 in footnotes 15 and 16 of this table (A-4).

[4] Ratio of nonpublic school teachers to public school teachers times public school capital outlay.

[5] See method detailed for table 40 in footnote 17 of this table (A-4).

[6] Ratio of nonpublic school teachers to public school teachers times public school interest.

[7] See method detailed for table 41 in footnotes 18 to 25 of this table (A-4).

[8] See method detailed for table 43 in footnote 26 of this table (A-4).

[9] Constant percent assumes that the percent that average daily attendance in public schools is of K–12 enrollment in public schools (92.5) will continue through 1984–85.

[10] y=current expenditure allocated to pupil costs per pupil in average daily attendance.

[11] Average daily attendance times cost per pupil for each year.

[12] Percent that expenditures for all programs were of expenditures allocated to pupil costs in recent years. Constant percent times total current expenditures allocated to pupil costs=current expenditures for all programs.

[13] y=average annual salary of instructional staff in public elementary and secondary schools.

[14] Average annual salary times number of instructional staff in public elementary and secondary schools in each year.

[15] Not applicable; trend adjusted arbitrarily.

[16] Capital outlay held constant at $4 billion during 1979–80 and following years.

[17] y=annual expenditures for interest in public elementary and secondary schools.

[18] y=expenditures for student education per full-time-equivalent student in institutions of higher education.

[19] y=expenditures for organized research in institutions of higher education, excluding federally funded research and development centers, and held at the 1975–76 level for the remainder of the projection.

[20] y=percent that expenditures in this category are of expenditures for student education in institutions of higher education. Percents are held at 1975–76 levels for the remainder of the projection.

[21] y=expenditures for major public services and held at the 1975–76 level for the remainder of the projection.

[22] Constant percent = estimated average capital outlay from current funds as percent of capital outlay from all sources.

[23] 11% decline each year, as in 1972–73, continued through 1976–77 and held at the 1976–77 level for the remainder of the projection.

Table A-5.—Methodology (Chapter VI)

Item	Text table number	Projection method				
		Constant	Trend			
			Least squares equation (y=dollars; t=years; 1964–65 = 1)	Index of determination	Standard error	Adjusted equation
Estimated average charges per full-time undergraduate resident degree-credit student in institutions of higher education (dollars)	44					
Tuition and required fees:[1]						
Public	.....	.....	$y'=\$393.80+\$9.74t$	0.95	9.86	$y'=\$399.13+\$9.49t$
Universities	.....	.....	$y'=\$490.83+\$16.66t$	.81	34.08	$y'=\$446.07+\$18.79t$
Other 4-year institutions	.....	.....	$y'=\$356.85+\$13.18t$	.92	16.30	$y'=\$385.22+\$11.78t$
2-year institutions	.....	.....	$y'=\$161.42+\$11.44t$	.87	18.66	$y'=\$156.03+\$11.70t$
Nonpublic	.....	.....	$y'=\$1,767.91+\$53.13t$	.91	71.55	$y'=\$1,637.73+\$59.33t$
Universities	.....	.....	$y'=\$2,103.35+\$60.08t$	.92	72.71	$y'=\$1,971.28+\$66.37t$
Other 4-year institutions	.....	.....	$y'=\$1,666.76+\$52.71t$	.93	60.29	$y'=\$1,542.92+\$58.61t$
2-year institutions	.....	.....	$y'=\$1,191.80+\$31.74t$	.84	58.27	$y'=\$1,097.86+\$36.21t$
Board:[2]						
Public	.....	$660	NA	NA	NA	NA[3]
Universities	.....	$685	NA	NA	NA	NA[3]
Other 4-year institutions	.....	$633	NA	NA	NA	NA[3]
2-year institutions	.....	$737	NA	NA	NA	NA[3]
Nonpublic	.....	$704	NA	NA	NA	NA[3]
Universities	.....	$790	NA	NA	NA	NA[3]
Other 4-year institutions	.....	$671	NA	NA	NA	NA[3]
2-year institutions	.....	$684	NA	NA	NA	NA[3]
Room:[4]						
Public	.....	.....	$y'=\$436.77+\$10.82t$	.93	12.87	$y'=\$413.92+\$11.91t$
Universities	.....	.....	$y'=\$476.18+\$9.74t$	.80	20.73	$y'=\$436.81+\$11.62t$
Other 4-year institutions	.....	.....	$y'=\$404.45+\$15.82t$	.88	19.68	$y'=\$380.27+\$17.09t$
2-year institutions	.....	.....	$y'=\$286.19+\$19.15t$	.92	24.12	$y'=\$239.05+\$21.40t$
Nonpublic	.....	.....	$y'=\$567.29+\$4.43t$	.35	25.32	$y'=\$529.92+\$6.21t$
Universities	.....	.....	$y'=\$666.20+\$4.96t$	.33	29.47	$y'=\$629.17+\$6.58t$
Other 4-year institutions	.....	.....	$y'=\$526.92+\$4.24t$	.44	20.07	$y'=\$497.73+\$5.63t$
2-year institutions	.....	.....	$y'=\$504.42+\$5.44t$	.30	34.64	$y'=\$456.31+\$7.97t$

[1] y'=average charge for tuition and required fees per full-time degree-credit student, calculated separately for each category by type and control of institution.

[2] y'=average charge for board per full-time degree-credit student, calculated separately for each category by type and control of institution with t=9 held constant to 1984–85.

[3] Charges frozen at the projected 1974–75 level. A projected decrease in charge for board is not expected to be valid.

[4] y'=average charge for room per full-time degree-credit student, calculated separately for each category by type and control of institution.

Estimation Methods

General Statement

The basic data for projecting the educational components listed below were wholly or partially estimated for the years indicated. (A few items which were estimated and explained in the tables are not shown here.)

Unless otherwise specified, all educational components were estimated separately by type and control of institution and by sex and attendance status of students:

1. Degrees, bachelor's and master's – total, library science, social work – 1963–64 and 1964–65 (tables 21–24)
2. Enrollment, first-time (tables 14–16)
    a. Degree-credit, 1966 and 1967
    b. Attendance status, 1964 to 1967
3. Enrollment, total (tables 6–11, 17–19)
    a. Graduate (resident), 1964 to 1966
    b. Undergraduate, 1964 to 1966
    c. Degree-credit, 1966
    d. Non-degree-credit, 1966
    e. Degree-credit, 1967
    f. Non-degree-credit, 1967
    g. Graduate (resident), 1967
    h. Total graduate, 1964–1967
    i. Undergraduate and first-professional, 1967
    j. Total graduate, 1968
    k. Total graduate, attendance status, 1964–1968
    l. Undergraduate and first-professional, 1968
    m. Non-degree-credit attendance status, 1964 to 1967
    n. Total graduate enrollment, including graduate extension enrollment, 1964–1968
4. Public elementary teachers and public secondary teachers, separately, 1971–1974
5. Instructional staff in institutions of higher education (tables 32–34)
    a. Instructional staff persons, 1963
    b. Full-time junior instructional staff, 1964 and 1965
    c. Full-time equivalent of part-time junior instructional staff, 1964 and 1965
    d. Full-time junior instructional staff, 1968

1. Degrees, bachelor's and master's – total, library science, social work – 1963–64 and 1964–65 (tables 21–24)

For 1963–64 and 1964–65, *all* master's degrees that were considered first-professional were reported as first-professional degrees. These were reported separately as first-professional degrees and were added to bachelor's degrees for 1963–64 and 1964–65. Most library science and social work master's degrees were in this category.

Beginning in 1965–66, all master's degrees, whether or not they were considered first-professional, were reported with master's degrees. In 1969, in order to obtain comparable series in these two fields as well as for total master's degrees and total bachelor's and first-professional degrees, degrees reported as first-professional degrees in library science and in social work for 1963–64 and 1964–65 were subtracted from bachelor's and first-professional degrees and added to master's degrees.

2. Enrollment, first-time (tables 14–16)

2a. Degree-credit, unreported in 1966 and 1967

To estimate resident and extension first-time opening fall enrollment by degree-credit status in both 1966 and 1967, percentages of resident and extension total enrollment by degree-credit status calculated from the unpublished 1966 comprehensive survey of enrollment (not available by sex) were applied to resident and extension first-time enrollment (combined degree-credit, non-degree-credit, men, and women).

To estimate resident and extension degree-credit first-time opening fall enrollment by sex in both 1966 and 1967, percentages of resident and extension degree-credit total enrollment by sex calculated from the 1965 opening fall enrollment survey were applied to estimated degree-credit first-time enrollment on men and women.

2b. Attendance status, unreported 1964 to 1967

To estimate degree-credit first-time enrollment by attendance status in 1964 to 1967, percentages of degree-credit first-time enrollment by attendance status calculated from the 1961 comprehensive survey of enrollment and the 1968 opening fall enrollment survey, together with interpolations of these percentages for the years 1964 to 1967, were applied to 1964 to 1967 degree-credit first-time enrollment (combined full-time and part-time).

3. Enrollment, total (tables 6–11, 17–19)

3a. Resident graduate, unreported 1964 to 1966

To estimate resident graduate opening fall enrollment from 1964 to 1966 in each control-of-institution and sex category, interpolations were made between the percentages that resident graduate enrollment were of resident and extension degree-credit enrollment in 4-year institutions in 1963 and 1967. These interpolated percentages were applied to resident and extension degree-credit enrollment in 1964, 1965, and 1966.

To estimate resident graduate opening fall enrollment by attendance status from 1964 to 1966 in each control-of-institution and sex category, interpolations were made between the percentages that full-time resident graduate enrollment were of total resident graduate enrollment in 1963 and 1967. These percentages were applied to estimated resident graduate enrollment for 1964, 1965, and 1966, in each control-of-institution and sex-of-student category.

3b. Undergraduate, unreported 1964 to 1966

To estimate resident and extension undergraduate and first-professional opening fall enrollment in 4-year institutions, 1964 to 1966, the estimate of resident graduate enrollment was subtracted from degree-credit resident and extension enrollment in each year in each control-of-institution and sex- and attendance-status-of-student category. (In 2-year institutions, undergraduate degree-credit enrollment is the same as total degree-credit enrollment.)

3c. Degree-credit, unreported in 1966

To estimate resident and extension total opening fall enrollment by degree-credit status and attendance status in 1966, percentages of resident and extension total enrollment by degree-credit status in each attendance-status category calculated from the unpublished 1966 comprehensive survey of enrollment (not available by sex) were applied to reported 1966 total enrollment by attendance-status categories.

To estimate full-time degree-credit and part-time degree-credit opening fall enrollment by sex in 1966, percentages of full-time degree-credit enrollment by sex and of part-time degree-credit enrollment by sex calculated from the 1965 opening fall enrollment survey (non-degree-credit enrollment was not reported by attendance status in 1965) were applied to estimated degree-credit attendance-status categories.

3d. Non-degree-credit, unreported in 1966

The estimation of non-degree-credit enrollment by attendance status in 1966 was a byproduct of the estimation of degree-credit enrollment by attendance status in 1966.

To estimate non-degree-credit total opening fall enrollment by attendance status and sex in 1966, estimated degree-credit categories by attendance and sex were subtracted from reported total degree-credit and non-degree-credit categories by attendance status and sex. These differences were adjusted to agree with the estimated nondegree categories by attendance status which were a byproduct of the estimation of degree-credit enrollment by attendance status.

3e. Degree-credit, unreported in 1967

To estimate resident and extension total opening fall enrollment by degree-credit status in 1967:

(1) Percentages of resident and extension total enrollment by degree-credit status in each sex category (not available by attendance status), calculated from the unpublished 1967 comprehensive survey of enrollment, were applied to reported 1967 total enrollment by sex categories.

(2) Similar percentages by degree-credit status in each attendance-status category (not available by sex), calculated from the 1967 comprehensive enrollment survey, were applied to reported 1967 resident and extension total enrollment by attendance-status categories.

(3) Probability estimates were applied to the two sets of estimates (one by sex, one by attendance status) to obtain estimates of resident and extension total enrollment by degree-credit status in each sex and attendance-status category.

3f. Non-degree-credit, unreported, 1967

The estimation of resident and extension non-degree-credit enrollment by sex and attendance status in 1967 was a byproduct of the estimation of resident and extension degree-credit enrollment by attendance status and sex in 1967.

3g. Resident graduate, unreported in 1967

To estimate resident graduate opening fall enrollment by sex and attendance status in 1967:

(1) Percentages of resident postbaccalaureate enrollment by resident graduate and first-professional enrollment status in each sex category, calculated from the unpublished 1967 comprehensive survey of enrollment, were applied to reported 1967 resident postbaccalaureate enrollment in corresponding sex categories.

(2) Similar percentages for attendance-status categories, calculated from the 1967 comprehensive survey of enrollment (this survey reported categories by sex and attendance status independently), were applied to reported 1967 resident postbaccalaureate enrollment in corresponding attendance-status categories.

(3) Probability estimates were applied to the two sets of estimates (one by sex, one by attendance status) to obtain estimates of resident graduate and resident first-professional enrollment by sex and attendance status.

3h. Total graduate by sex, unreported in 1964–1967

To estimate total graduate opening fall enrollment for each sex in 1964–1967, the average of the percentages that resident graduate enrollment was of total graduate enrollment in 1968–1972 was applied to the estimates of resident graduate enrollment for 1964–1967.

3i. Undergraduate and first-professional, unreported in 1967

To estimate resident and extension degree-credit undergraduate and first-professional opening fall enrollment in 1967 (a revision because the 1967 comprehensive survey of enrollment was not available until 1970), estimated 1967 resident graduate enrollment was subtracted from the total of estimated 1967 resident and extension degree-credit enrollment in 4-year institutions in each sex and attendance-status category.

3j. Graduate enrollment by sex and attendance status, unreported in 1968

To estimate graduate opening fall enrollment for each sex in 1968, the percentage that graduate enrollment was of postbaccalaureate (graduate and first-professional) enrollment was assumed to be the same as the 1969 percentage. This percentage was applied to the 1968 postbaccalaureate enrollment to estimate 1968 graduate enrollment.

3k. Total graduate by control and attendance status, unreported in 1964–1968

To estimate total graduate opening fall enrollment by control and attendance status in 1964–1968:

(1) The percentage that resident graduate enrollment was of total graduate enrollment in private institutions was held constant at the 1969 level and applied to estimates of private resident graduate enrollment for 1964–1968. Total public graduate enrollment for each year, 1964–1968, was estimated as the difference between total graduate enrollment and total private graduate enrollment.

(2) Full-time graduate enrollment was assumed to be the same as full-time resident graduate enrollment in 1964–1967. Part-time graduate enrollment was estimated as the difference between total graduate enrollment and full-time graduate enrollment for each year, 1964–1967.

(3) To estimate graduate opening fall enrollment by attendance status in 1968, it was assumed that the number of part-time first-professional students in 1968 was the same small number as in 1969. This number was then subtracted from total part-time postbaccalaureate enrollment to estimate graduate part-time enrollment. Graduate full-time enrollment was estimated as the difference between total graduate enrollment and part-time graduate enrollment.

3l. Undergraduate and first-professional, unreported in 1968

To estimate degree-credit undergraduate and first-professional opening fall enrollment in 1968 (revised because the 1967 comprehensive survey of enrollment was not available until 1970), estimated 1968 graduate enrollment was subtracted from the total of reported 1968 degree-credit enrollment in each sex and attendance-status category.

3m. Enrollment, total non-degree-credit by attendance status, 1964–67 (tables 9–11)

Non-degree-credit enrollment by attendance status was not reported in the opening fall enrollment surveys prior to 1968. In 1964, the sample survey of full-time-equivalent enrollment and credit hours reported that 40 percent of total non-degree-credit enrollment was full time (not available by type and control of institution).

To estimate the full-time percentages for 1964, the full-time percentages by type and control of institution from the 1968 opening fall enrollment survey were prorated down to equal about 40 percent for the total. For the years 1965 to 1967, the percentages between 1964 and the actual 1968 percentages, for each type and control of institution, were interpolated.

3n. Total graduate enrollment, including graduate extension enrollment, unreported in 1964–1968

To estimate total graduate enrollment, by control, including graduate extension enrollment, in 1964-1968, graduate resident enrollments in 1964-1968 were divided by the percentage that resident graduate enrollment was of total graduate enrollment in 1969.

4. Public elementary and secondary teachers, separately, unreported 1971–1974 (tables 27, 28)

For teachers in public elementary and secondary schools in each year, both the number of elementary teachers and the number of secondary teachers reported by the National Education Association were prorated to the total number of teachers reported in *Statistics of Public Schools*.

5. Instructional staff in institutions of higher education (tables 32–34)

5a. Instructional staff persons, unreported in 1963

For each category of type and control of institution, the average ratio of total professional positions to total number of professional persons was calculated from *Faculty and Other Professional Staff in Institutions of Higher Education*, first term 1963–64. This ratio was applied to the number of reported instructional positions for both professional ranks to estimate the number of instructional persons.

5b. Full-time junior instructional staff, unreported in 1964–65

The percentage in 1966 that full-time junior instructional staff was of total junior instructional staff was assumed to have been the same in 1964 through 1965.

5c. Full-time equivalent of part-time junior instructional staff, unreported in 1964–65

The percentage in 1966 that full-time equivalent of part-time junior instructional staff was of part-time junior instructional staff was assumed to have been the same in 1964 and 1965.

5d. Full-time junior instructional staff, unreported in 1968

The percentage in 1967 that full-time junior instructional staff was of total junior instructional staff was assumed to have remained constant.

Classification of Degrees by Field of Study

[Individual fields listed in *Taxonomy of instructional Programs in Higher Education*]

I. Social Sciences
- Social Sciences
  - Social sciences, general
  - Anthropology
  - Archaeology
  - Economics
  - History
  - Geography
  - Political science and government
  - Sociology
  - Criminology
  - International relations
  - Afro-American (black culture) studies
  - American Indian cultural studies
  - Mexican-American cultural studies
  - Urban studies
  - Demography
  - Area studies
  - Other
- Psychology
  - Psychology, general
  - Experimental psychology (animal and human)
  - Clinical psychology
  - Psychology for counseling
  - Social psychology
  - Psychometrics
  - Statistics in psychology
  - Industrial psychology
  - Developmental psychology
  - Physiological psychology
  - Other
- Public Affairs and Services
  - Community services, general
  - Public administration
  - Parks and recreation management
  - Social work and helping services (other than clinical social work)
  - Law enforcement and corrections (baccalaureate and higher programs)
  - International public service (other than diplomatic service)
  - Other
- Library Science
  - Library science, general
  - Other

II. Humanities
- Architecture and Environmental Design
  - Environmental design, general
  - Architecture
  - Interior design
  - Landscape architecture
  - Urban architecture
  - City, community, and regional planning
  - Other
- Fine and Applied Arts
  - Fine arts, general
  - Art (painting, drawing, sculpture)
  - Art history and appreciation
  - Music (performing, composition, theory)
  - Music (liberal arts program)
  - Music history and appreciation (musicology)
  - Dramatic arts
  - Dance
  - Applied design (ceramics, weaving, textile design, fashion design, jewelry, metalsmithing, interior decoration, commercial art)

    - Cinematography
    - Photography
    - Other
  - Foreign Languages
    - Foreign languages, general (concentration on more than one foreign language without major emphasis on one)
    - French
    - German
    - Italian
    - Spanish
    - Russian
    - Chinese
    - Japanese
    - Latin
    - Greek, classical
    - Hebrew
    - Arabic
    - Indian (Asiatic)
    - Scandinavian languages
    - Slavic languages (other than Russian)
    - African languages (non-Semitic)
    - Other
  - Communications
    - Communications, general
    - Journalism (printed media)
    - Radio/television
    - Advertising
    - Communications media (use of videotape, films, etc. oriented specifically toward radio/television
    - Other
  - Letters
    - English, general
    - Literature, English
    - Comparative literature
    - Classics
    - Linguistics (includes phonetics, semantics, and philology)
    - Speech, debate, and forensic science (rhetoric and public address)
    - Creative writing
    - Teaching of English as a foreign language
    - Philosophy
    - Religious studies (excludes theological professions)
    - Other

III. Natural Sciences and Miscellaneous Fields

  - Mathematics and Statistics
    - Mathematics, general
    - Statistics, mathematical and theoretical
    - Applied mathematics
    - Other
  - Computer and Information Sciences
    - Computer and information sciences, general
    - Information sciences and systems
    - Data processing
    - Computer programing
    - Systems analysis
    - Other
  - Engineering
    - Engineering, general
    - Aerospace, aeronautical and astronautical engineering
    - Agricultural engineering
    - Architectural engineering
    - Bioengineering and biomedical engineering
    - Chemical engineering (includes petroleum refining)
    - Petroleum engineering (excludes petroleum refining)
    - Civil, construction, and transportation engineering
    - Electrical, electronics, and communications engineering
    - Mechanical engineering
    - Geological engineering
    - Geophysical engineering
    - Industrial and management engineering
    - Metallurgical engineering
    - Materials engineering
    - Ceramic engineering
    - Textile engineering
    - Mining and mineral engineering
    - Engineering physics
    - Nuclear engineering
    - Engineering mechanics
    - Environmental and sanitary engineering
    - Naval architecture and marine engineering
    - Ocean engineering
    - Engineering technologies (baccalaureate and higher programs)
    - Other
  - Physical Sciences
    - Physical sciences, general
    - Physics, general (excludes biophysics)
    - Molecular physics
    - Nuclear physics
    - Chemistry, general (excludes biochemistry)
    - Inorganic chemistry
    - Organic chemistry
    - Physical chemistry
    - Analytical chemistry
    - Pharmaceutical chemistry

  - Astronomy
  - Astrophysics
  - Atmospheric sciences and meteorology
  - Geology
  - Geochemistry
  - Geophysics and seismology
  - Earth sciences, general
  - Paleontology
  - Oceanography
  - Metallurgy
  - Other
- Biological Sciences
  - Biology, general
  - Botany, general
  - Bacteriology
  - Plant pathology
  - Plant pharmacology
  - Plant physiology
  - Zoology, general
  - Pathology, human and animal
  - Premedical, predental, and preveterinary science
  - Pharmacology, human and animal
  - Physiology, human and animal
  - Microbiology
  - Anatomy
  - Histology
  - Biochemistry
  - Biophysics
  - Molecular biology
  - Cell biology (cytology, cell physiology)
  - Marine biology
  - Biometrics and biostatistics
  - Ecology
  - Entomology
  - Genetics
  - Radiobiology
  - Nutrition, scientific (excludes nutrition in home economics and dietetics)
  - Neurosciences
  - Toxicology
  - Embryology
  - Other
- Agriculture and Natural Resources
  - Agriculture, general
  - Agronomy (field crops and crop management)
  - Soils science (management and conservation)
  - Animal science (husbandry)
  - Dairy science (husbandry)
  - Poultry science
  - Fish, game, and wildlife management
  - Horticulture (fruit and vegetable production)
  - Ornamental horticulture (floriculture, nursery science)
  - Agricultural and farm management
  - Agricultural economics
  - Agricultural business
  - Food science and technology
  - Forestry
  - Natural resources management
  - Agriculture and forestry technologies (baccalaureate and higher programs)
  - Range management
  - Other
- Health Professions
  - Health professions, general
  - Hospital and health care administration
  - Nursing (baccalaureate and higher programs)
  - Dentistry, D.D.S. or D.M.D. degree
  - Dental specialties (work beyond first-professional degree, D.D.S. or D.M.D.)
  - Medicine, M.D. degree
  - Medical specialties (work beyond first-professional degree, M.D.)
  - Occupational therapy
  - Optometry
  - Osteopathic medicine, D.O. degree
  - Pharmacy
  - Physical therapy
  - Dental hygiene (baccalaureate and higher programs)
  - Public health
  - Medical record librarianship
  - Podiatry (Pod.D. or D.P.) or podiatric medicine (D.P.M.)
  - Biomedical communication
  - Veterinary medicine, D.V.M. degree
  - Veterinary medicine specialties (work beyond first-professional degree, D.V.M.)
  - Speech pathology and audiology
  - Chiropractic
  - Clinical social work (medical and psychiatric and specialized rehabilitation services)
  - Medical laboratory technologies (baccalaureate and higher programs)
  - Dental technologies (baccalaureate and higher programs)
  - Radiologic technologies (baccalaureate and higher programs)
  - Other
- Accounting
- Other Business and Management
  - Business and commerce, general

  - Business statistics
  - Banking and finance
  - Investments and securities
  - Business management and administration
  - Operations research
  - Hotel and restaurant management
  - Marketing and purchasing
  - Transportation and public utilities
  - Real estate
  - Insurance
  - International business
  - Secretarial studies (baccalaureate and higher programs)
  - Personnel management
  - Labor and industrial relations
  - Business economics
  - Other
- Education
  - Education, general
  - Elementary education, general
  - Secondary education, general
  - Junior high school education
  - Higher education, general
  - Junior and community college education
  - Adult and continuing education
  - Special education, general
  - Administration of special education
  - Education of the mentally retarded
  - Education of the gifted
  - Education of the deaf
  - Education of the culturally disadvantaged
  - Education of the visually handicapped
  - Speech correction
  - Education of the emotionally disturbed
  - Remedial education
  - Special learning disabilities
  - Education of the physically handicapped
  - Education of the multiply handicapped
  - Social foundations (history and philosophy of education)
  - Educational psychology (includes learning theory)
  - Preelementary education (kindergarten)
  - Educational statistics and research
  - Educational testing, evaluation, and measurement
  - Student personnel (counseling and guidance)
  - Educational administration
  - Educational supervision
  - Curriculum and instruction
  - Reading education (methodology and theory)
  - Art education (methodology and theory)
  - Music education (methodology and theory)
  - Mathematics education (methodology and theory)
  - Science education (methodology and theory)
  - Physical education
  - Driver and safety education
  - Health education (includes family life education)
  - Business, commerce, and distributive education
  - Industrial arts, vocational and technical education
  - Agriculture education
  - Home economics education
  - Other
- Other
  - Home economics
    - Home economics, general
    - Home decoration and home equipment
    - Clothing and textiles
    - Consumer economics and home management
    - Family relations and child development
    - Foods and nutrition (includes dietetics)
    - Institutional management and cafeteria management
    - Other
  - Law
    - Law, general
    - Other
  - Military sciences
    - Military science (Army)
    - Naval science (Navy, Marines)
    - Aerospace science (Air Force)
    - Other
  - Theology
    - Theological professions, general
    - Religious music
    - Biblical languages
    - Religious education
    - Other
  - Interdisciplinary studies
    - General liberal arts and sciences
    - Biological and physical sciences
    - Humanities and social sciences
    - Engineering and other disciplines
    - Other

Changes in Degree-Level Definitions

Prior to 1960–61	1960–61 through 1964–65	1965–66
BACHELOR'S DEGREES		
Number of years of work not specified. First-professional degrees included.	Number of years of work specified as less than 5. First-professional degrees excluded.	Number of years of work specified as less than 6. First-professional degrees excluded.
FIRST-PROFESSIONAL DEGREES		
Included with bachelor's degrees.	5 or more years of work required. Includes first-professional degrees, such as degrees in dentistry, law, medicine, and theology. Includes master's degrees, such as degrees in business administration, hospital administration, law, library science, social work, and theology.	6 or more years of work required. Includes first-professional degrees, such as degrees in dentistry, law, medicine, and theology. Excludes all master's degrees.
MASTER'S DEGREES		
	Includes all master's degrees except some considered first-professional. Includes second-professional degrees below level of doctorate.	Includes all master's degrees, including those considered first-professional prior to 1965–66. Includes second-professional degrees below level of doctorate.
DOCTOR'S DEGREES		
Includes Ph.D. in any field and such degrees as doctor of education, doctor of juridical science, and doctor of public health (preceded by professional degree in medicine or sanitary engineering).	No change.	No change.

GLOSSARY

Courses

Adult education courses

Group instruction in courses which are designed for, or attended principally by, persons who have terminated their formal education.

Degree-credit courses

Courses which carry credit toward a bachelor's or higher degree.

Individual lessons

Lessons in music, art, speech, etc.

Non-degree-credit courses

Courses extending not more than 3 years beyond high school and designed to prepare students for immediate employment in an occupation or cluster of occupations at the technical and/or semiprofessional level (engineering-related or non-engineering-related), or at the craftsman-clerical level (artisans, skilled workers, and clerical workers).

Short courses

Courses that carry no credit toward a degree because of less than prescribed length.

Degrees

Bachelor's or first-level degrees

Lowest degree conferred by college, university, or professional school, requiring 4 or more years of academic work. For changes in National Center for Education Statistics classification, see appendix A, "Changes in Degree-Level Definitions."

Doctor's degrees (except first-professional)

Highest academic degree conferred by a university; includes Ph.D. in any field; includes doctor of education, doctor of juridical science, and doctor of public health (preceded by professional degree in medicine or sanitary engineering).

First-professional degrees

An academic degree which requires at least 2 academic years of previous college work for entrance and which requires a total of at least 6 academic years of college work for completion. Beginning in 1965–66, National Center for Education Statistics classification includes the following degrees only: Law (LL.B. or J.D. only); dentistry (D.D.S. or D.M.D. only); medicine (M.D. only); veterinary medicine (D.V.M. only); chiropody or podiatry (D.S.C. or D.P.); optometry (O.D.); osteopathy (D.O.); and theology (B.D. only). For changes in National Center for Education Statistics classification, see appendix A, "Changes in Degree-Level Definitions."

Master's or second-level degrees

An academic degree higher than a bachelor's but lower than a doctor's. All degrees classified as first-professional are excluded.

Expenditures, elementary and secondary

Current expenditures, regular elementary and secondary day schools

Includes current expenditures for administration, instruction, plant operation and maintenance, fixed charges (retirement, social security, insurance, etc.), and other school services (pupil transportation, food services, health services, attendance services, and miscellaneous school services).

Current expenditures, total

Includes current expenditures for regular elementary and secondary day school programs and current expenditures for other school programs including summer schools, adult education, community colleges, and community services.

Expenditures, total

Includes total current expenditures for all programs, capital outlay, and interest on school debt.

Expenditures, general

Capital outlay

An expenditure for land or existing buildings, improvement of grounds, construction of buildings, additions to buildings, and initial or additional equipment. Includes replacement and rehabilitation and installment or lease payments (excluding interest) which have a terminal date and result in the acquisition of property.

Constant dollars (1974–75)

Expenditure data which have been adjusted by means of price and cost indexes to equal the purchasing power of 1974–75 dollars. This eliminates inflationary factors and allows direct comparison between years.

Current dollars

Expenditure data which have not been adjusted to compensate for inflation. (Projection of unadjusted expenditure data has been limited to 2 years.)

Current expenditures

Any expenditure except for capital outlay and debt service. If accounts are kept on the accrual basis, current expense includes total charges incurred, whether paid or unpaid. If accounts are kept on the cash basis, it includes only actual disbursements.

Debt service

Includes payment for retirement of debt and for use of long-term loans (not repaid in the year in which made).

Interest

Any payment for use of money.

Expenditures, higher education

Current expenditures, total

Total expenditures from current funds less expenditures from current funds which are used for capital outlay (about 16 percent of total capital outlay is expended from current funds).

Current fund expenditures, total

Includes expenditures for auxiliary enterprises, organized research, related activities, student aid, and student education (approximately 16 percent of total capital outlay by institutions of higher education is estimated to have been expended directly from current funds).

Auxiliary enterprises.—Expenditures for services to students, faculty, or other staff for which a fee is charged that is directly related to, but not necessarily equal to, the cost of service, for example, dormitories, food service, and student stores.

Organized research.—Expenditures for all sponsored research and all separately budgeted research. Excludes expenditures for research carried on as part of the regular instructional services departmental research which are included with expenditures for student education.

Related activities.—Expenditures for activities which exist to provide instructional or laboratory experience for students and which incidentally create goods or services that may be sold on the campus or to the general public. Expenditures are incurred in addition to those necessary solely for the educational benefit of the students. Expenditures from current funds which could not be reported under "student education" or "organized research" are included here.

Student aid.—Expenditures for assistance to students through scholarships, fellowships, and prizes. Recipients are not required to repay, either through services or monies.

Student education.—Expenditures for those components of educational and general expenditures which are most closely related to instruction. Includes instruction and research which are part of regular instructional services (departmental research), extension and public service, libraries, physical plant operation and maintenance, general administration, and other sponsored activities.

Expenditures, total

Includes expenditures for capital outlay, debt service including interest, and total current expenditures.

Student charges

Student charges include charges for tuition, required fees, room, and board. Required fees are those for matriculation, laboratory, library, health, etc. They do not include books. Student charges as reported under this heading are based on full-time, resident (in-State or in-district) students.

Schools

Elementary schools

Schools with teaching primarily organized by grades, composed of a span of grades not above grade eight.

Independent nursery and kindergarten schools

Schools that offer nursery and/or kindergarten instruction only.

Other schools

Other schools include residential schools for exceptional children (public and nonpublic), Federal schools for Indians, federally operated schools on Federal installations, and subcollegiate departments of public and private institutions of higher education.

Regular schools

Schools for normal children that satisfy the requirements of the State education laws and offer at least one grade beyond kindergarten.

Residential schools for exceptional children

Residential schools for the handicapped (outside the regular public and private school systems) include public and private residential schools for the deaf, blind, mentally deficient, epileptic, and delinquent. (Most handicapped children are in special classes within the regular public and private school system.)

Secondary schools

Schools with teaching organized by subject matter taught, composed of junior high and high schools.

Special schools

Special schools are schools not in the regular school system, such as trade schools or business colleges.

Students

Advanced-degree students

Students who have attained at least one standard degree and have been accepted as candidates for master's or doctor's degrees.

Extension students

Students who most commonly take instruction away from main campus; also students receiving on-campus instruction offered by an extension division.

First-professional students

See "First-professional degrees."

First-time students

Freshmen not previously enrolled in any institutions of higher education.

Full-time students

Students enrolled in courses with credits equal to at least 75 percent of the normal full-time semester course load.

Full-time-equivalent students

The estimated number of full-time students equal to a given number of part-time students. (For degree-credit students, the percentage of part-time to full-time is estimated at 33 percent; for non-degree-credit students, 28 percent.)

Graduate students

Students who have attained at least one standard degree and are or might be candidates for a master's or doctor's degree (except first-professional).

Occupational students

See "Non-degree-credit courses."

Postbaccalaureate students

Students who have attained at least one standard degree and are or might be candidates for a first-professional, master's, or doctor's degree.

Resident students (enrollment)

Students who attend classes on a main campus or a branch campus. Students' living quarters (whether on- or off-campus) and their legal domicile (whether in-State or out-of-State) are irrelevant.

Resident students (student charges)

Students with legal domicile in-State or in-district.

Unclassified students

Students who are not candidates for a degree, diploma, certificate, or equivalent award, although taking courses in regular classes with other students.

Undergraduate students

Degree-credit or non-degree-credit students who have not received formal recognition as having completed the prescribed degree-credit or non-degree-credit requirements of an accredited institution of higher education.

APPENDIX B

Statistical Tables

Table B-1.—School-age population (U.S. Census Projection Series I, II, and III), ages 5, 6, and 5–13 years: United States, 1964 to 1985[1]

[Ages as of October 1, populations in thousands]

Year (fall)	Age 5			Age 6			Ages 5–13		
	I	II	III	I	II	III	I	II	III
1964	.....	4,108	.....	.....	4,118	.....	.....	35,373	.....
1965	.....	4,108	.....	.....	4,098	.....	.....	35,877	.....
1966	.....	4,143	.....	.....	4,106	.....	.....	36,358	.....
1967	.....	4,055	.....	.....	4,142	.....	.....	36,661	.....
1968	.....	3,980	.....	.....	4,058	.....	.....	36,799	.....
1969	.....	3,882	.....	.....	3,986	.....	.....	36,772	.....
1970	.....	3,703	.....	.....	3,996	.....	.....	36,484	.....
1971	.....	3,521	.....	.....	3,718	.....	.....	35,926	.....
1972	.....	3,427	.....	.....	3,534	.....	.....	35,257	.....
1973	.....	3,378	.....	.....	3,441	.....	.....	34,556	.....
1974	.....	3,432	.....	.....	3,391	.....	.....	33,903	.....
				PROJECTED					
[illegible]975	.....	3,513	.....	.....	3,446	.....	.....	33,300	.....
1976	.....	3,498	.....	.....	3,528	.....	.....	32,763	.....
1977	.....	3,237	.....	.....	3,513	.....	.....	32,023	.....
1978	.....	3,070	.....	.....	3,252	.....	.....	31,210	.....
1979	3,091	3,042	3,009	3,084	3,084	3,084	30,597	30,548	30,515
1980	3,368	3,125	2,940	3,106	3,057	3,023	30,456	30,164	29,945
1981	3,653	3,237	2,871	3,383	3,139	2,956	30,692	29,983	29,399
1982	3,893	3,376	2,914	3,669	3,252	2,885	31,205	29,977	28,931
1983	4,106	3,521	3,045	3,909	3,391	2,928	31,876	30,064	28,541
1984	4,298	3,664	3,164	4,123	3,537	3,058	32,760	30,213	28,185
1985	4,472	3,797	3,250	4,314	3,679	3,179	33,634	30,508	27,932

[1] In projecting population, the Census Bureau uses a cohort-component method in which each of the components of population change (fertility, mortality, and migration) is projected separately. The key assumption in this method is that of completed cohort fertility (average number of births per woman upon completion of childbearing).

The Census Bureau uses several different assumptions as to the ultimate completed cohort fertility. The following are three of these assumptions: Series I—2.7 children per woman, Series II—2.1 children per woman, and Series III—1.7 children per woman.

The Series II projection is used throughout this publication (except in tables B-3 and B-4) for making projections of educational statistics. The Series II projection was selected because the ultimate completed cohort-fertility assumption of 2.1 births per woman most closely agrees with the most recent fertility and expected fertility data. A population projection based on 2.1 births per woman is also of interest because at this rate and without migration the population would replace itself after enough time had elapsed for the age structure to stabilize.

SOURCES: National Center for Education Statistics estimates are based on U.S. Department of Commerce, Bureau of the Census, publications: (1) unpublished data consistent with estimated data in *Current Population Reports*, "Population Estimates and Projections: Estimates of the Population of the United States by Age, Sex, and Race: April 1, 1960 to July 1, 1973," Series P-25, No. 519, April 1974, and (2) "Projections of the Population of the United States, by Age and Sex, 1975 to 2000 with Extension of Total Population to 2025" (advanced report), Series P-25, No. 541, February 1975.

Table B-2.—High school- and college-age population: United States, 1964 to 1985[1]

[Ages as of October 1, populations in thousands]

Year (fall)	14–17	18		18–21		Composite populations[2]	
	Total	Men	Women	Men	Women	Men	Women
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1964	14,229	1,699	1,651	5,827	5,715	1,292	1,350
1965	14,201	1,831	1,777	6,254	6,117	1,368	1,419
1966	14,473	1,784	1,731	6,641	6,479	1,381	1,395
1967	14,829	1,794	1,740	7,049	6,874	1,408	1,415
1968	15,255	1,833	1,780	7,334	7,154	1,501	1,555
1969	15,630	1,891	1,835	7,327	7,151	1,660	1,750
1970	15,992	1,946	1,885	7,476	7,303	1,677	1,726
1971	16,341	1,991	1,934	7,649	7,471	1,723	1,751
1972	16,595	2,032	1,972	7,847	6,666	1,759	1,771
1973	16,770	2,067	2,005	8,027	7,837	1,810	1,817
1974	16,880	2,116	2,050	8,196	7,998	1,838	1,858
				PROJECTED			
1975	16,902	2,144	2,079	8,373	8,172	1,880	1,905
1976	16,845	2,141	2,079	8,504	8,302	1,924	1,949
1977	16,728	2,138	2,077	8,591	8,393	1,964	1,964
1978	16,528	2,148	2,084	8,648	8,451	2,006	2,026
1979	16,122	2,137	2,071	8,660	8,462	2,047	2,067
1980	15,608	2,102	2,036	8,636	8,433	2,068	2,076
1981	15,062	2,065	1,998	8,586	8,374	2,079	2,079
1982	14,553	1,997	1,934	8,488	8,272	2,090	2,083
1983	14,283	1,904	1,846	8,278	8,073	2,096	2,083
1984	14,279	1,834	1,776	8,022	7,817	2,079	2,054
1985	14,358	1,798	1,740	7,741	7,545	2,058	2,023

[1] All ages are in completed years except age 18, which has been calculated to nearest birthday. No fertility assumptions are used in this table because the persons included are already born.

[2] The composite population (used for projecting degrees) was derived by (a) prorating to 100 percent the detruncated percentage distribution of the ages of recipients of bachelor's degrees which had been found by Laure M. Sharp in the 1958 survey *Two Years After the College Degree*; and (b) applying these percentages to corresponding age groups which were consistent with the other populations shown in this table. For further estimating details, see appendix A, "Estimation Methods," sec. 5.

SOURCE: National Center for Education Statistics estimates are based on U.S. Department of Commerce, Bureau of the Census, publications: (1) unpublished data consistent with estimated data in *Current Population Reports*, "Current Population Estimates and Projections: Estimates of the Population of the United States, by Age, Sex, and Race: April 1, 1960 to July 1, 1973," Series P-25, No. 519, April 1974, and (2) "Projections of the Population of the United States, by Age and Sex, 1975 and 2000 with Extensions of Total Population to 2025," (advanced report), Series P-25, No. 541, February 1975.

Table B-3.—Enrollment in grades K–8 and 9–12 of regular day schools, with projections based on U.S. Census population projection Series I, by institutional control: United States, fall 1964 to 1984[1]

[In thousands]

Year (fall)	Total public and nonpublic			Public			Nonpublic (estimated)[2]		
	K–12	K–8	9–12	K–12	K–8	9–12	K–12	K–8	9–12[3]
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1964	47,716	35,025	12,691	41,416	30,025	11,391	6,300	5,000	[4]1,300
1965	48,473	35,463	13,010	42,173	30,563	11,610	6,300	[4]4,900	[4]1,400
1966	49,239	35,945	13,294	43,039	31,145	11,894	6,200	4,800	1,400
1967	49,891	36,241	13,650	43,891	31,641	12,250	6,000	4,600	1,400
1968	50,744	36,626	14,118	44,944	32,226	12,718	5,800	4,400	[4]1,400
1969	51,119	36,797	14,322	45,619	32,597	13,022	5,500	4,200	1,300
1970	51,309	36,677	14,632	45,909	32,577	13,332	5,400	[5]4,100	[5]1,300
1971	51,281	36,165	15,116	46,081	32,265	13,816	5,200	[6]3,900	[6]1,300
1972	50,644	35,531	15,113	45,744	31,831	13,913	4,900	[6]3,700	[6]1,200
1973	50,229	34,953	15,277	45,429	31,353	14,077	4,800	[6]3,600	[6]1,200
1974	49,756	34,419	15,337	45,056	30,919	14,137	4,700	[6]3,500	[6]1,200
					PROJECTED[7]				
1975	49,300	33,800	15,500	44,700	30,400	14,300	4,600	3,400	1,200
1976	48,900	33,300	15,600	44,400	30,000	14,400	4,500	3,300	1,200
1977	48,100	32,600	15,500	43,700	29,400	14,300	4,400	3,200	1,200
1978	47,200	31,800	15,400	42,900	28,700	14,200	4,300	3,100	1,200
1979	46,300	31,200	15,100	42,100	28,200	13,900	4,200	3,000	1,200
1980	45,800	31,200	14,600	41,600	28,200	13,400	4,200	3,000	1,200
1981	45,600	31,500	14,100	44,400	28,500	12,900	4,200	3,000	1,200
1982	45,800	32,200	13,600	41,600	29,200	12,400	4,200	3,000	1,200
1983	46,300	33,000	13,300	42,100	30,000	12,100	4,200	3,000	1,200
1984	47,200	33,900	13,300	43,000	30,900	12,100	4,200	3,000	1,200

[1] Does not include independent nursery schools and kindergartens, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, federally operated schools on Federal installations, and other schools not in the regular school system.

[2] Estimated unless otherwise noted. Estimates for years prior to 1965 revised in spring 1968 on basis of 1965 Office of Education survey.

[3] Includes some pupils enrolled in grades 7 and 8 of nonpublic secondary schools in 1965 through 1968.

[4] Reported data from Office of Education surveys.

[5] Estimates are based on reported data from the Office of Education and the National Catholic Education Association.

[6] Estimates are based on reports from the National Catholic Education Association.

[7] The projection of fall enrollment in regular day schools is based on the following assumptions: (a) Enrollment rates of the 6-year-old population in public school grade 1 will follow the 1964–1974 trend. (b) The public school enrollment in grade 7 in a given year t will exceed the public school enrollment in grade 6 in year t-1 by 3.6 percent of the projected enrollment in grades K–8 in Catholic elementary schools in year t-1. (c) The public school enrollment in grade 9 in year t will exceed the public school enrollment in grade 8 in year t-1 by 5.2 percent of the projected enrollment in grades K–8 in Catholic elementary schools in year t-1. (d) The retention rates of all other public school grades will remain constant at the average of the rates for the past 5 years. (e) Enrollments in grades K–8 in Catholic elementary schools will decrease 100,000 students per year from 2.6 million in 1974 to 2.0 million in 1980 and then remain constant. (f) Enrollments in grades K–8 in all regular nonpublic day schools will decrease 100,000 students per year from 3.5 million in 1974 to 3.0 million in 1979 and then remain constant: grades 9–12 in these schools will remain constant at the 1974 estimated level.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

SOURCES: Enrollment data and estimates are based on (1) U.S. Department of Health, Education, and Welfare, Office of Education, publications: (a) *Statistics of Public Schools,* fall 1964 through 1974, (b) *Statistics of Nonpublic Elementary and Secondary Schools, 1970–71,* (c) *Statistics of Public and Nonpublic Elementary and Secondary Day Schools, 1968–69,* (d) *Statistics of Nonpublic Elementary and Secondary Schools, 1965–66,* (e) *Nonpublic School Enrollment in Grades 9–12, Fall 1964, and Graduates, 1963–64;* and (2) National Catholic Educational Association publications: (a) *A Report on U.S. Catholic Schools, 1970–71;* and (b) *U.S. Catholic Schools,* 1971–72 through 1974–75.

The population projections as of October 1 of 6-year-olds, on which the enrollment projections in grade 1 are based, are consistent with Series 1 population projections in U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-25, No. 541, February 1975. The I, II and III population projections, together with definitions of each series, are shown in appendix B, table B-1.

Table B-4.—Enrollment in grades K–8 and 9–12 of regular day schools, with projections based on U.S. Census population projection Series III, by institutional control: United States, fall 1964 to 1984[1]

[In thousands]

Year (fall)	Total public and nonpublic			Public			Nonpublic (estimated)[2]		
	K–12	K–8	9–12	K–12	K–8	9–12	K–12	K–8	9–12[3]
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1964	47,716	35,025	12,691	41,416	30,025	11,391	6,300	5,000	[4]1,300
1965	48,473	35,463	13,010	42,173	30,563	11,610	6,300	[4]4,900	[4]1,400
1966	49,239	35,945	13,294	43,039	31,145	11,894	6,200	4,800	1,400
1967	49,891	36,241	13,650	43,891	31,641	12,250	6,000	4,600	1,400
1968	50,744	36,626	14,118	44,944	32,226	12,718	5,800	4,400	[4]1,400
1969	51,119	36,797	14,322	45,619	32,597	13,022	5,500	4,200	1,300
1970	51,309	36,677	14,632	45,909	32,577	13,332	5,400	[5]4,100	[5]1,300
1971	51,281	36,165	15,116	46,081	32,265	13,816	5,200	[6]3,900	[6]1,300
1972	50,644	35,531	15,113	45,744	31,831	13,913	4,900	[6]3,700	[6]1,200
1973	50,229	34,953	15,277	45,429	31,353	14,077	4,800	[6]3,600	[6]1,200
1974	49,756	34,419	15,337	45,056	30,919	14,137	4,700	[6]3,500	[6]1,200
					PROJECTED[7]				
1975	49,300	33,800	15,500	44,700	30,400	14,300	4,600	3,400	1,200
1976	48,900	33,300	15,600	44,400	30,000	14,400	4,500	3,300	1,200
1977	48,100	32,600	15,500	43,700	29,400	14,300	4,400	3,200	1,200
1978	47,200	31,800	15,400	42,900	28,700	14,200	4,300	3,100	1,200
1979	46,200	31,100	15,100	42,000	28,100	13,900	4,200	3,000	1,200
1980	45,200	30,600	14,600	41,000	27,600	13,400	4,200	3,000	1,200
1981	44,300	30,200	14,100	40,100	27,200	12,900	4,200	3,000	1,200
1982	43,500	29,900	13,600	39,300	26,900	12,400	4,200	3,000	1,200
1983	43,000	29,700	13,300	38,800	26,700	12,100	4,200	3,000	1,200
1984	42,800	29,500	13,300	38,600	26,500	12,100	4,200	3,000	1,200

[1] Does not include independent nursery schools and kindergartens, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, federally operated schools on Federal installations, and other schools not in the regular school system.

[2] Estimated unless otherwise noted. Estimates for years prior to 1965 revised in spring 1968 on basis of 1965 Office of Education survey.

[3] Includes some pupils enrolled in grades 7 and 8 of nonpublic secondary schools in 1965 through 1968.

[4] Reported data from Office of Education surveys.

[5] Estimates based on reported data from the Office of Education and the National Catholic Education Association.

[6] Estimates based on reports from the National Catholic Education Association.

[7] The projection of fall enrollment in regular day schools is based on the following assumptions: (a) Enrollment rates of the 6-year-old population in public school grade 1 will follow the 1964–1974 trends. (b) The public school enrollment in grade 7 in a given year t will exceed the public school enrollment in grade 6 in year t-1 by 3.6 percent of the projected enrollment in grades K–8 in Catholic elementary schools in year t-1. (c) The public school enrollment in grade 9 in year t will exceed the public school enrollment in grade 8 in year t-1 by 5.2 percent of the projected enrollment in grades K–8 in Catholic elementary schools in year t-1. (d) The retention rates of all other public school grades will remain constant at the average of the rates for the past 5 years. (e) Enrollments in grades K–8 in Catholic elementary schools will decrease by 100,000 students per year from 2.6 million in 1974 to 2.0 million in 1980 and then remain constant. (f) Enrollments in grades K–8 in all regular nonpublic day schools will decrease by 100,000 students per year from 3.5 million in 1974 to 3.0 million in 1979 and then remain constant; grades 9–12 in these schools will remain constant at the 1974 estimated level.

NOTE.—Data are for 50 States and the District of Columbia for all years. Because of rounding, details may not add to totals.

SOURCES: Enrollment data and estimates are based on (1) U.S. Department of Health, Education, and Welfare, Office of Education, publications: (a) *Statistics of Public Schools*, fall 1964 through 1974, (b) *Statistics of Nonpublic Elementary and Secondary Schools, 1970–71*, (c) *Statistics of Public and Nonpublic Elementary and Secondary Day Schools, 1968–69*, (d) *Statistics of Nonpublic Elementary and Secondary Schools, 1965–66*; (e) *Nonpublic Schools Enrollment in Grades 9–12, Fall 1964, and Graduates, 1963–64*; and (2) National Catholic Educational Association Publications: (a) *A Report on U.S. Catholic Schools, 1970–71*, and (b) *U.S. Catholic Schools*, 1971–72 through 1974–75.

The population projections as of October 1 of 6-year-olds, on which the enrollment projections in grade 1 are based, are consistent with Series III population projections in U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-25, No. 541, February 1975. The I, II, and III population projections, together with definitions of each series, are shown in appendix B, table B-1.

Table B-5.–First-year students enrolled for master's and doctor's degrees and for first-professional degrees, by sex: United States and outlying areas, fall 1960 to 1973[1]

[In thousands]

Year (fall)	Enrollment for master's and doctor's degrees			Enrollment for first-professional degrees		
	Total	Men	Women	Total	Men	Women
1960[2]	197	140	57	(3)	(3)	(3)
1961[4]	217	152	65	(3)	(3)	(3)
1962[4]	240	166	75	(3)	(3)	(3)
1963[4]	271	184	87	(3)	(3)	(3)
1964[4]	318	213	105	(3)	(3)	(3)
1965[4]	359	237	122	(3)	(3)	(3)
1966	371	241	130	36	35	2
1967	428	270	158	42	39	2
1968	458	279	179	47	44	3
1969	494	296	199	56	52	4
1970	528	316	212	63	58	5
1971	525	310	215	69	62	7
1972	540	310	230	72	62	9
1973	562	312	250	75	62	13

[1] In 1973, the last year for which data are available, outlying areas made up slightly less than 0.5 percent of first-year enrollment for master's and doctor's degrees and slightly more than 1 percent of first-year enrollment for first-professional degrees.

[2] Estimation of sex breakdown based on the percentage that the sum of men's master's degrees in 1961–62 and men's doctor's degees in 1964–65 was of the sum of total master's degrees in 1961–62 and total doctor's degrees in 1964–65.

[3] Not collected prior to 1966.

[4] The percentage that men's enrollment was of total enrollment was interpolated.

NOTE.–Because of rounding, details may not add to totals.

SOURCES: Enrollment data from U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, publications: (1) *Students Enrolled for Advanced Degrees*, fall 1966 through 1973, (2) *Enrollment for Master's and Higher Degrees, Fall 1965. Summary Report*, (3) *Enrollment for Master's and Higher Degrees, Fall 1964*, and (4) *Enrollment for Advanced Degrees*, fall 1960 through 1963.

Table B-6.—Estimated time lapse (in years) from first-year enrollment for advanced degrees to doctor's degree, by field of study, and by sex[1]

	Mathematics and statistics (1)	Computer and information sciences (2)	Engineering (3)	Physical sciences (4)	Biological sciences (5)	Agriculture and natural resources (6)	Health professions (7)	Accounting (8)
Men	6	6	6	6	6	6	6	6
Women	6	6	6	6	6	7	6	6

	Other business and management (9)	Education (10)	Architecture and environmental design (11)	Fine and applied arts (12)	Foreign languages (13)	Social science (14)	Psychology (15)	Library sciences (16)
Men	6	10	8	8	8	7	6	7
Women	6	11	9	9	8	7	7	7

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[1] Based on data from National Science Foundation on the time lapse from graduate entry to doctor's degree. All students enrolled in the first year of an advanced-degree course did not necessarily enter graduate school during the same year.

SOURCE: National Science Foundation, Science Education Studies Group, unpublished analysis of data on earned doctor's degrees in 1971–72.

Table B-7.—Constant-dollar index

[1974–75 = 100]

July to June	Consumer price index[1]	Construction cost index[2]
1964–65	60.342	49.015
1965–66	61.662	50.847
1966–67	63.559	53.733
1967–68	65.680	56.619
1968–69	68.844	61.292
1969–70	72.921	65.562
1970–71	76.680	72.011
1971–72	79.446	79.982
1972–73	82.653	87.128
1973–74	90.048	94.371
1974–75	100.000	100.000
	ESTIMATED[3]	
1975–76	108.841	106.917

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[1] The monthly indexes were averaged on a July-to-June basis to correspond with the school year and converted to 1974–75 = 100. The 1967 = 100 index number for 1974–75 was 155.158.

[2] The monthly indexes were averaged on a July-to-June basis to correspond with the school year and converted to 1974–75 = 100. The 1967 = 100 index number for 1974–75 was 181.917.

[3] Estimated on the assumption that the 1974–75 rate of inflation will continue through 1975–76.

SOURCES: The Consumer Price Index, prepared by the Bureau of Labor Statistics, U.S. Department of Labor; and the American Appraisal Company Construction Cost Index, published in *Construction Review* by the U.S. Department of Commerce.

Table B-8.—Estimated receipts by regular and "other" educational institutions, by level, by control, and by source: United States, 1965–66 to 1972–73[1]

Source of funds, by control and level (1)	1965–66 (2)	1967–68 (3)	1969–70 (4)	1971–72 (5)	1972–73 (6)	1965–66 (7)	1967–68 (8)	1969–70 (9)	1971–72 (10)	1972–73 (11)
	AMOUNT (In billions of current dollars)					PERCENT				
All levels of education:										
Total, public and nonpublic . .	$46.8	$58.9	$70.8	$86.3	$91.4	100.0	100.0	100.0	100.0	100.0
Federal	5.3	6.9	7.5	9.6	10.1	11.3	11.7	10.6	11.1	11.1
State	13.7	17.3	22.9	27.6	30.2	29.3	29.4	32.3	32.0	33.0
Local	15.5	18.9	22.0	27.5	28.7	33.1	32.1	31.1	31.9	31.4
All other	12.3	15.8	18.4	21.6	22.4	26.3	26.8	26.0	25.0	24.5
Total, public	36.9	46.8	57.3	70.4	74.8	100.0	100.0	100.0	100.0	100.0
Federal	3.9	5.2	5.8	7.7	8.0	10.6	11.1	10.1	11.0	10.7
State	13.6	17.2	22.8	27.4	30.0	36.8	36.7	39.8	38.9	40.1
Local	15.5	18.9	21.9	27.4	28.6	42.0	40.4	38.2	38.9	38.2
All other	3.9	5.5	6.8	7.9	8.2	10.6	11.8	11.9	11.2	11.0
Total, nonpublic	9.9	12.1	13.5	15.9	16.6	100.0	100.0	100.0	100.0	100.0
Federal	1.4	1.7	1.7	1.9	2.1	14.1	14.1	12.6	11.9	12.7
State	.1	.1	.1	.2	.2	1.0	.8	.8	1.3	1.2
Local	(2)	(2)	.1	.1	.1	(3)	(3)	.7	.6	.6
All other	8.4	10.3	11.6	13.7	14.2	84.9	85.1	85.9	86.2	85.5

See footnotes at end of table.

Table B-8.—Estimated receipts by regular and "other" educational institutions, by level, by control, and by source: United States, 1965–66 to 1972–73[1]—Continued

Source of funds, by control and level (1)	1965–66 (2)	1967–68 (3)	1969–70 (4)	1971–72 (5)	1972–73 (6)	1965–66 (7)	1967–68 (8)	1969–70 (9)	1971–72 (10)	1972–73 (11)
	AMOUNT (In billions of current dollars)					PERCENT				
Elementary and secondary										
Total, public and nonpublic	$30.9	$37.9	$45.0	$55.8	$58.7	100.0	100.0	100.0	100.0	100.0
Federal	2.2	3.0	3.3	4.7	4.7	7.1	7.9	7.3	8.4	8.0
State	9.9	12.3	16.1	19.1	20.9	32.0	32.5	35.8	34.2	35.6
Local	15.1	18.3	21.0	26.3	27.3	48.9	48.3	46.7	47.2	46.5
All other	3.7	4.3	4.6	5.7	5.8	12.0	11.3	10.2	10.2	9.9
Total, public	27.3	33.7	40.5	50.2	53.0	100.0	100.0	100.0	100.0	100.0
Federal	2.2	3.0	3.3	4.7	4.7	8.0	9.0	8.1	9.3	8.9
State	9.9	12.3	16.1	19.1	20.9	36.3	36.5	39.8	38.1	39.4
Local	15.1	18.3	21.0	26.3	27.3	55.3	54.2	51.9	52.4	51.5
All other	.1	.1	.1	.1	.1	.4	.3	.2	.2	.2
Total, nonpublic	3.6	4.2	4.5	5.6	5.7	100.0	100.0	100.0	100.0	100.0
Federal	...	...	...	...	...	...	...	...	...	...
State	...	...	...	...	...	...	...	...	...	...
Local	...	...	...	...	...	...	...	...	...	...
All other	3.6	4.2	4.5	5.6	5.7	100.0	100.0	100.0	100.0	100.0

Table B-8.—Estimated receipts by regular and "other" educational institutions, by level, by control, and by source: United States, 1965–66 to 1972–73[1]—Continued

Source of funds, by control and level (1)	1965–66 (2)	1967–68 (3)	1969–70 (4)	1971–72 (5)	1972–73 (6)	1965–66 (7)	1967–68 (8)	1969–70 (9)	1971–72 (10)	1972–73 (11)
	AMOUNT (In billions of current dollars)					PERCENT				
Institutions of higher education										
Total, public and nonpublic . .	$15.9	$21.0	$25.8	$30.5	$32.7	100.0	100.0	100.0	100.0	100.0
Federal	3.1	3.9	4.2	4.9	5.4	19.5	18.5	16.3	16.3	16.5
State	3.8	5.0	6.8	8.5	9.3	23.9	23.8	26.4	27.6	28.6
Local	.4	.6	1.0	1.2	1.4	2.5	2.9	3.8	3.8	4.1
All other	8.6	11.5	13.8	15.9	16.6	54.1	54.8	53.5	52.3	50.8
Total, public	9.6	13.1	16.8	20.2	21.8	100.0	100.0	100.0	100.0	100.0
Federal	1.7	2.2	2.5	3.0	3.3	17.6	17.1	15.0	15.0	15.2
State	3.7	4.9	6.7	8.3	9.1	38.4	37.7	40.0	40.8	41.8
Local	.4	.6	.9	1.1	1.3	4.1	4.5	5.1	5.5	5.8
All other	3.8	5.4	6.7	7.8	8.1	39.9	40.7	39.9	38.7	37.2
Total, nonpublic	6.3	7.9	9.0	10.3	10.9	100.0	100.0	100.0	100.0	100.0
Federal	1.4	1.7	1.7	1.9	2.1	22.1	21.8	18.8	18.6	18.9
State	.1	.1	.1	.2	.2	1.5	1.2	1.6	2.0	2.2
Local	(2)	(2)	.1	.1	.1	.1	.3	.7	.5	.6
All other	4.8	6.1	7.1	8.1	8.5	76.3	76.7	78.9	78.9	78.3

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[1] Includes estimates for "other" elementary and secondary schools such as residential schools for exceptional children, Federal schools for Indians, and federally operated elementary and secondary schools on military posts. The annual receipts of "other" elementary and secondary schools were estimated as follows: Public, $200 million, annually, 1965–66 to 1972–73; nonpublic, $100 million, annually, 1965–66 to 1972–73.

[2] Less than $50 million.

[3] Less than 0.05 percent.

NOTE.—Receipts include revenue and nonrevenue receipts, current and plant-fund receipts, and proceeds of loans, less transfers of funds which would result in duplication, and less repayment of loans. All receipts and deductions concerning loans are included in "all other" sources. Deduction of transfers was made from data in "all other" sources.

Table B-9.—Federal funds for education and related activities: 1960 to 1976

[In thousands of dollars]

Type of support, level, and program area	1960	1962	1964	1966	1968	1969	1970	1971	1972	1973	1974	1975 (estimated)	1976 (estimated)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
PART I. Federal funds supporting education in educational institutions													
Total grants and loans . . .	$1,714,781	$2,109,796	$2,777,381	$5,762,160	$7,781,636	$8,084,491	$9,230,355	$10,927,846	$11,770,991	$12,889,880	$13,878,836	$16,546,488	$16,211,901
Grants, total	1,474,455	1,789,263	2,312,467	5,150,450	7,178,356	7,551,211	8,712,389	10,593,204	11,422,265	12,343,928	12,726,973	16,186,293	15,752,363
Elementary and secondary education	490,480	542,320	886,501	2,037,103	2,967,004	2,838,430	3,212,418	3,724,363	3,856,527	4,084,972	4,207,467	4,988,716	4,873,570
School assistance in federally affected areas	258,196	282,909	334,289	400,593	506,372	397,581	656,372	527,043	648,608	580,493	559,527	649,205	384,389
Economic opportunity programs[1]	47,133	53,000	67,000	404,300	626,533	552,434	534,482	664,355	473,307	718,572	730,036	806,815	879,161
National Defense Education Act-equipment[2]	62,718	53,574	69,841	98,192	109,000	74,316	58,547	44,647	42,829	36,602	31,716	41,600	28,475
Supporting services[3]	1,221	1,917	2,423	71,078	280,481	290,107	237,532	215,252	267,749	281,193	242,067	286,426	411,709
Assistance for educationally deprived children[4]	106	137	179	747,103	1,058,983	1,096,106	1,207,894	1,575,282	1,613,847	1,560,359	1,534,372	1,919,327	2,088,233
Teacher Corps	. . .	4,000	5,100	6,325	16,019	19,358	18,191	28,761	23,887	32,092	33,073	33,984	36,383
Vocational education	32,800	37,579	38,569	93,268	186,224	152,441	181,379	241,481	282,545	306,728	289,610	309,970	263,973
Dependents' schools abroad	32,766	40,520	61,500	79,100	68,220	106,589	137,139	146,815	169,906	190,803	218,237	208,289	233,903
Public lands revenue for schools	40,994	43,524	46,000	54,144	52,294	66,112	82,376	78,893	73,285	90,646	110,116	139,277	156,954
Assistance in special areas[5]	10,017	20,760	32,800	68,800	58,286	71,118	78,992	120,719	156,757	176,922	159,649	133,149	124,141
Veterans' education	. . .	. . .	. . .	. . .	3,200	4,924	6,233	13,763	16,674	43,835	67,463	86,800	79,810
Emergency school assistance	. . .	. . .	. . .	. . .	. . .	. . .	. . .	51,239	69,816	43,391	184,507	225,214	162,810
Other[6]	4,527	4,400	5,400	5,200	2,383	5,353	13,282	16,313	19,516	24,536	48,122	48,860	53,949
Higher education	828,880	1,170,322	1,456,836	2,271,747	3,240,170	3,346,219	3,910,878	4,895,588	5,172,443	5,964,987	6,063,691	7,352,207	7,271,904
Basic research in U.S. educational institutions proper[7]	407,000	602,900	686,800	941,000	1,039,000	1,020,000	984,000	1,064,385	1,192,167	1,175,466	1,290,824	1,412,046	[8]1,412,000
Research facilities[7]		121,800	133,500	194,000	199,780	238,516	226,130	227,908	175,747	204,985	183,274	199,070	[8]199,000
Training grants, fellowships, and traineeships . . .	169,494	290,900	443,000	636,400	701,419	662,830	886,980	1,037,202	982,008	1,184,880	1,120,481	1,216,808	1,000,181
Facilities and equipment	1,206	3,404	32,536	109,547	540,382	482,387	513,182	518,944	400,147	236,686	140,012	161,357	122,023
Other institution support	13,580	26,718	69,500	163,800	139,637	173,085	178,156	288,090	292,291	338,626	363,732	406,485	419,691
Other student assistance . . .	248,800	103,900	62,300	214,200	808,883	769,445	1,101,924	1,781,581	2,130,083	2,824,303	2,958,368	3,898,461	4,118,989
Other higher education assistance	. . .	11,700	17,400	18,800	2,099	9,976	12,546	8,478	. . .	. . .	. . .	. . .	. . .

See footnotes at end of table.

Table B-9.—Federal funds for education and related activities: 1960 to 1976—Continued

[In thousands of dollars]

Type of support, level, and program area	1960	1962	1964	1966	1968	1969	1970	1971	1972	1973	1974	1975 (estimated)	1976 (estimated)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
PART I. Federal funds supporting education in educational institutions—Continued													
Vocational-technical and continuing education (not classifiable by level)	154,095	76,621	189,131	841,600	971,181	1,366,553	1,586,093	1,973,253	2,393,295	2,293,969	2,465,815	3,825,370	3,606,619
Vocational, technical, and work training[9]	16,144	23,821	158,231	821,300	851,683	1,163,444	1,266,254	1,515,741	1,829,481	1,474,847	1,494,927	2,750,006	2,675,500
Veterans' education	134,300	49,900	25,100	6,300	79,646	123,970	244,634	357,414	429,229	658,424	800,375	907,295	773,462
General continuing education[10]	(11)	(11)	(11)	(11)	28,701	60,364	65,855	88,305	125,715	149,738	148,117	153,326	146,746
Training State and local personnel	3,651	2,900	5,800	14,000	11,152	18,775	9,350	11,793	8,870	10,960	12,396	14,743	11,911
Loans, total (higher education)	240,326	320,532	464,894	611,700	603,281	503,280	507,966	334,441	348,726	345,732	351,862	379,195	459,548
Student loan program, National Defense Education Act[12]	40,326	74,632	177,394	235,900	226,303	230,694	196,843	231,706	287,163	324,551	362,795	394,927	486,943
College facilities loans[13]	200,000	245,900	287,500	375,800	376,978	272,586	311,123	102,735	61,563	21,181	−10,933	−15,732	−27,395
PART II. Other Federal funds for education and related activities													
Total	**2,285,793**	**2,770,319**	**3,217,179**	**3,901,944**	**3,820,279**	**3,332,168**	**3,431,975**	**4,011,245**	**4,526,821**	**4,712,247**	**4,858,530**	**5,536,812**	**5,578,189**
Applied research and development[7]	471,000	754,700	906,300	1,054,000	1,157,000	1,230,000	1,240,000	1,318,963	1,470,566	1,465,356	1,708,589	1,769,808	[8]1,770,000
School lunch and milk programs	305,512	386,900	411,700	421,900	543,845	597,700	676,196	928,186	1,213,075	1,298,002	1,266,873	1,617,033	1,463,364
Training of Federal personnel	1,027,875	1,177,483	1,370,400	1,706,705	1,138,333	639,853	691,694	854,930	961,215	1,061,926	980,032	1,082,141	1,148,159
U.S. academies	53,113	59,416	119,796	154,593	141,599	170,468	184,262	218,869	232,047	275,671	248,567	271,260	295,678
Professional training, military	[14]956,000	1,086,584	1,202,604	1,470,507	923,470	375,105	492,040	614,099	718,180	779,934	719,889	783,781	808,352
Civilian education and training in non-Federal facilities	18,762	31,483	48,000	81,605	73,264	94,280	15,392	21,962	10,988	6,321	11,576	27,100	44,129
Library services	21,105	22,232	25,243	72,215	136,099	186,124	170,135	186,338	165,096	166,712	207,075	245,379	265,072
Grants to public libraries	6,056	6,932	7,443	40,915	62,017	62,794	50,235	52,975	56,246	45,782	43,202	54,597	41,266
National library services[15]	15,049	15,300	17,800	31,300	74,082	123,330	119,900	133,363	108,850	120,930	163,873	190,782	223,806

International education	83,526	102,050	112,600	229,429	272,008	278,135	193,464	180,668	122,740	77,920	94,563	139,381	209,613
Educational exchange program	22,450	21,050	20,600	50,271	41,670	38,172	30,860	36,101	37,837	28,131	30,510	32,291	38,568
Agency for International Development projects	...	...	...	...	140,000	170,000	111,325	105,608	56,612	22,556	47,231	88,501	152,950
Action (previously Peace Corps)	61,076	81,000	92,000	179,158	43,641	44,095	28,150	25,026	19,819	22,013	15,084	15,031	16,411
Other international education and training	...	...	...	...	46,697	25,868	23,139	13,933	9,472	5,230	1,738	3,558	1,684
Other	376,776	346,954	390,936	417,895	372,994	400,356	460,486	542,160	593,839	642,322	601,607	683,070	721,981
Agricultural extension service	53,716	59,252	79,400	89,216	90,030	97,273	124,526	154,672	169,811	186,803	193,436	213,976	219,765
Educational television facilities[16]	...	...	...	4,863	6,737	8,756	19,163	28,580	8,000	28,568	22,000	32,970	41,766
Education in Federal correctional institutions	1,463	2,138	2,885	3,615	3,662	3,816	5,007	6,333	9,086	9,494	10,172	12,578	12,784
Value of surplus property transferred:													
Acquisition cost of personal property	310,000	244,900	268,700	266,400	199,383	223,503	246,330	265,668	299,806	276,699	256,937	258,429	266,000
Fair value of real property	...	21,000	15,100	15,100	26,276	13,264	12,468	25,718	12,200	25,288	18,226	26,000	26,000
Other[17]	11,608	19,664	24,851	38,701	46,906	53,764	52,992	71,189	94,957	116,470	101,836	140,117	156,646

[1] Includes Office of Economic Opportunity, Indian education, Appalachian Regional Development, Department of Labor, and Head Start preschool.

[2] Includes small amounts for National Defense Education Act loans to private elementary-secondary schools.

[3] Includes supplemental centers, school library materials, strengthening State education agencies, captioned films for the deaf, dissemination of information, school counseling and testing, American Printing House for the Blind, planning and evaluation.

[4] Includes Elementary and Secondary Education Act, title I, handicapped children, dropout prevention, bilingual education, Kendall School for the Deaf, and Model School for the Deaf.

[5] Includes District of Columbia, Canal Zone, territories and dependencies, Cuban refugees, and payments in lieu of taxes by the Atomic Energy Commission and the Tennessee Valley Authority.

[6] Includes elementary-secondary programs of the National Science Foundation, National Foundation on the Arts and Humanities, Department of Defense, Junior ROTC, and National Aeronautics and Space Administration; also, Office of Child Development programs not included elsewhere, and Office of Education programs and expenditures not otherwise included.

[7] Data are from *Federal Funds for Research, Development, and Other Scientific Activities*, annual publication, National Science Foundation. Includes university-operated research centers.

[8] 1976 amounts are not available. Data are amounts for 1975, rounded to nearest million.

[9] Includes adult vocational education and manpower training programs.

[10] Includes Office of Education, Action, Social and Rehabilitation Service, Department of Housing and Urban Development, Office of Economic Development, and additional programs for continuing education.

[11] Included in "Vocational, technical, and work training."

[12] Includes National Defense Education Act and insured student loans.

[13] Includes Department of Housing and Urban Development college housing loans and Office of Education college facilities loans.

[14] Actual figure not available. Amount estimated is 88% of 1962 amount.

[15] Includes Library of Congress, Smithsonian Institution, General Services Administration, National Archives and Records Service, National Agricultural Library, National Library of Medicine, and Government Printing Office depository library and catalog and index activities.

[16] Also includes education boradcasting facilities.

[17] Includes Office of Education and other education program and administration expenditures not otherwise included.

NOTE.–Amounts are based on Federal outlay but "obligation" or other bases are used when outlay figures are not available.

SOURCE: Compiled by the National Center for Education Statistics, U.S. Department of Health, Education, and Welfare, from information collected by the Office of Management and Budger for its report *Special Analyses, Budget of the United States, Fiscal year 1976*. Research data are from *Federal Funds for Research, Development, and Other Scientific Activities*, Vol. XXIII, National Science Foundation.

Table B-10.—Office of Education expenditures, by legislative program: Fiscal years 1960 to 1976

[In thousands of dollars]

Legislative program	1960	1962	1964	1966	1968	1970	1971	1972	1973	1974	1975[1]	1976[1]
1	2	3	4	5	6	7	8	9	10	11	12	13
Total	$468,966	$647,488	$873,005	$2,024,428	$3,613,476	$4,111,988	$4,543,641	$4,903,711	$4,990,263	$4,484,816	$6,185,876	$6,418,824
Elementary and Secondary Education Act[2]	811	1,247	1,648	816,982	1,327,723	1,412,949	1,743,115	1,836,564	1,784,215	1,701,127	2,106,289	2,361,162
Title I. Educationally deprived children	...	...	...	746,904	1,049,116	[3]1,170,365	1,516,210	1,570,388	1,604,642	1,480,068	1,806,600	1,940,766
Title II. Library resources	...	...	...	47,871	91,064	44,670	59,253	74,648	80,835	71,267	82,261	57,786
Title III. Supplementary education centers	...	...	...	10,938	161,256	158,781	112,071	122,527	128,613	128,236	137,523	109,600
Title V. Strengthening State[4] departments of education	811	1,247	1,648	11,269	26,297	29,247	28,546	32,879	31,011	36,781	37,536	17,000
Title VII. Bilingual education	...	...	...	...	...	6,192	20,876	26,010	29,864	3,731	42,300	73,900
Title VIII. Dropout prevention[5]	...	...	...	...	...	3,704	4,170	9,112	8,380	1,064	1,070	...
Consolidation - Innovation	...	...	...	...	...	...	...	...	...	...	...	80,100
Consolidation - library and learning resources	...	...	...	...	...	...	...	...	...	...	...	82,000
School assistance in federally affected areas	258,198	282,909	334,289	409,603	506,372	656,372	527,043	649,608	580,493	558,526	640,205	364,364
Maintenance and operation	174,850	226,419	283,688	353,861	470,887	620,463	506,851	629,305	560,516	536,089	620,238	340,300
Construction	83,348	56,490	50,601	55,742	35,485	35,909	20,192	20,303	19,977	22,437	20,967	24,064
Higher Education act	...	...	...	36,232	385,884	631,090	663,307	772,707	946,720	901,785	1,601,940	1,963,258
Title I. University community services	...	...	...	3,926	9,897	10,069	10,963	9,518	5,791	22,833	13,243	1,750
Title II. Library programs:[6]												
College library resources	...	...	...	...	46,906	34,063	5,596	3,913	6,600	10,107	13,886	8,630
Library training	...	...	...	...	11,381	7,006	4,789	2,489	4,409	2,824	3,810	1,686
Title III. Strengthening developing institutions	...	...	...	...	22,428	27,731	36,894	35,766	40,072	48,868	69,560	85,940
Title IV. Student assistance:												
Equal opportunity grants	...	...	...	...	103,104	142,077	160,678	167,600	183,197	239,212	606,300	787,744
Work-study program and cooperative education (incl. St. incent. grants)	...	...	...	30,834	111,812	172,076	181,886	251,987	380,843	82,080	[7]277,400	[7]316,864

See footnotes at end of table.

Table B-10.—Office of Education expenditures, by legislative program: Fiscal years 1960 to 1976—Continued

[In thousands of dollars]

Legislative program	1960	1962	1964	1966	1968	1970	1971	1972	1973	1974	1975[1]	1976[1]
1	2	3	4	5	6	7	8	9	10	11	12	13
Higher Education Act—Continued												
Insured loans	...	...	...	...	20,947	98,330	150,396	201,321	206,498	294,346	331,876	427,196
Student loans insurance fund	...	...	...	...	...	2,323	11,036	26,680	43,279	83,823	149,113	182,943
Title V. Teacher Corps	...	...	...	362	16,019	18,191	28,761	23,887	32,092	33,073	33,984	36,383
Title VI. Undergraduate instructional assistance:												
Television and other equipment	...	...	...	...	5,416	4,068	2,258	5,684	11,841	3,783	11,784	9,000
Special programs for disadvantaged—Talent Search, Special Services, Upward Bound (inc. Vet's Cost of Ed.)	...	...	...	10	2,497	7,437	44,215	43,063	45,302	[8]77,551	[9]88,124	[10]97,189
Other higher education activities[9]	...	...	...	300	5,478	5,721	7,079	...	6,805	3,285	3,292	8,244
Higher Education Facilities Act	...	...	...	105,526	461,965	437,387	340,033	212,626	168,284	77,900	68,788	71,105
Title I. Public Community colleges and technical institutes and other undergraduate facilities	...	...	...	48,739	317,063	317,227	277,690	180,700	151,088	52,805	37,500	38,500
State administration and planning	...	...	...	1,675	5,066	5,961	5,540	7,221	...	...	...	...
Major disaster areas	...	...	...	...	147	...	...	200	46	...	...	...
Title II. Graduate facilities	...	...	...	4,220	37,970	...	...	...	...	...	...	...
Title III. College construction loans	...	...	...	50,892	101,719	114,199	56,802	24,468	8,018	13,014	20,000	23,000
Construction loans interest subsidization	...	...	...	...	...	...	1	39	9,133	12,081	11,268	9,806
Vocational education[10]	46,179	51,762	54,503	128,466	255,224	285,568	370,964	430,722	518,138	482,738	517,986	471,546
Vocational Education Act of 1963 George-Barden and supplemental acts	46,179	51,762	54,503	118,396	250,197	271,282	328,087	370,619	446,975	399,209	434,411	424,900

Work-study program and cooperative education	...	...	...	10,072	9,027	5,322	18,011	24,266	26,535	28,716	28,231	18,526
Innovative programs in vocational education and research	...	...	...	...	...	1,503	8,801	13,777	16,376	20,502	17,880	9,970
National advisory councils	...	...	...	...	...	94	271	321	370	337	229	...
State advisory councils	...	...	...	...	...	2,218	2,474	2,858	2,886	3,666	4,316	...
Consumer and homemaking education	...	...	...	...	...	5,060	16,310	19,091	26,197	30,318	32,980	20,560
Education professions development[10]	8,683	13,893	13,989	42,147	60,271	104,671	93,941	93,117	80,303	93,404	74,772	28,307
Elementary and secondary education training programs[11]	8,683	13,893	13,989	42,147	58,387	94,424	86,003	83,193	79,848	76,242	69,682	25,818
Higher and adult education training programs	...	...	...	...	1,884	10,247	7,938	9,924	10,456	17,242	5,090	2,489
Public Library Services and Construction Act	6,056	6,932	7,443	40,916	62,017	52,887	52,270	54,086	46,782	44,441	55,708	52,806
Public library services	6,056	6,932	7,443	25,000	34,306	33,480	37,637	44,284	37,188	36,230	41,077	31,461
Construction	...	...	...	15,916	26,615	17,527	12,788	7,184	5,918	4,127	8,770	7,400
Interlibrary cooperation	...	...	...	...	1,096	1,671	1,845	2,618	2,096	[12]4,084	[12]5,860	[12]13,745
Educational improvement for the handicapped	380	1,191	4,982	15,366	40,956	79,066	86,146	93,138	106,356	122,561	142,388	186,850
Education for the handicapped	...	...	...	...	7,867	31,073	29,280	32,867	38,572	43,016	54,963	103,886
Teacher education and recruitment	308	943	2,466	10,448	24,162	31,219	27,366	26,206	28,187	32,614	30,182	33,124
Research and innovation (includes deaf-blind and resource centers)	...	...	1,016	3,227	8,227	12,515	20,867	18,883	21,584	22,648	26,838	26,363
Captioned films and media services	72	248	1,500	1,691	649	4,268	6,079	11,706	9,281	13,218	12,200	12,293
Early childhood education	...	...	...	...	...	...	2,764	6,887	6,732	11,086	10,406	11,196
National Defense Education Act	117,986	158,801	218,338	320,172	370,034	332,898	330,783	392,233	382,736	361,278	317,533	359,856
Title II, Student loans and cancellations	40,326	74,532	111,729	177,394	182,826	194,520	231,706	287,183	287,075	281,339	264,633	312,980
Title III, Instructional assistance: Grants and loans[13]	40,848	39,510	98,131	76,175	86,916	58,547	44,047	42,829	38,802	31,716	41,800	28,475

See footnotes at end of table.

Table B-10.—Office of Education expenditures, by legislative program: Fiscal years 1960 to 1976—Continued

[In thousands of dollars]

Legislative program	1960	1962	1964	1966	1968	1970	1971	1972	1973	1974	1975[1]	1976[1]
1	2	3	4	5	6	7	8	9	10	11	12	13
National Defense Education Act—Continued												
Title IV. College teacher fellowships	4,620	17,313	19,880	31,974	60,650	63,518	40,884	53,782	[14]26,316	26,828	8,200	4,800
Title V. Guidance counselling, and testing	12,870	14,084	13,710	22,017	23,093	...	...	...	...	...	...	...
Title VI. Language development[15]												
Language and area centers, fellowships, and research	10,301	13,382	16,088	12,612	17,560	16,313	13,546	8,669	12,742	11,386	13,100	13,620
Research and development	6,004	7,461	12,712	31,245	79,956	87,823	114,906	[16]102,235	[16]104,003	[16]152,979	[16]111,331	[16]133,288
Adult basic education[17]	...	...	...	33,616	28,701	43,464	57,018	55,971	55,061	63,270	64,774	66,290
Land-grant colleges	5,062	10,744	14,500	14,500	14,500	21,961	12,680	12,600	18,700	12,200	12,200	...
Drug Abuse	...	...	...	...	...	...	...	6,916	11,936	...	...	...
Special foreign currency program—training, research and study (grants to American institutions overseas)	...	6	138	500	857	774	1,749	2,279	1,862	1,908	3,676	1,776
Education TV and broadcasting facilities[18]	...	...	...	...	...	4,163	5,580	12,182	10,068	5,859	7,943	10,568
Follow Through	...	...	...	...	...	...	...	2,024	36,995	17,526	39,350	38,400
Indian education	...	...	...	...	...	...	...	...	...	15,694	38,806	39,000
Emergency school aid[19]	...	...	...	5,291	7,437	10,808	70,371	92,214	50,677	204,577	246,265	165,280
Office of Education salaries and expenses, including technical services, planning and evaluation, and miscellaneous items not otherwise included	11,808	12,884	14,261	26,901	40,906	47,714	68,170	73,646	101,606	77,411	107,644	99,284
Miscellaneous expired accounts	...	...	...	...	...	...	17,745	11,049	...	...	...	...
Consolidated Working Fund-net advances and reimbursement	+29	[illegible]	−1,788	−1,026	−9,325	+2,404	−789	−207	−1,889	−348	...	...
Expenditures from funds transferred to the Office of Education by other Federal agencies[20]												
Manpower Development and Training Act[21]	...	...	64,777	75,532	99,461	121,461	141,529	126,800	128,711	127,925	71,857	...

Educational television facilities	. . .	. . .	1,982	4,063	6,737	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Mutual exchange activities (foreign currency)[22]	. . .	. . .	. . .	1,502	1,434	930	944	873	829	646	827	. . .
Appalachian Regional Development and Training Act[23]	. . .	. . .	. . .	. . .	21,753	27,120	37,906	36,040	46,249	42,972	43,377	. . .
Cuban Refugee Program	. . .	5,195	9,603	9,302	16,990	19,488	19,851	18,110	14,080	11,630	13,895	. . .
Office of Economic Opportunity[24]	. . .	. . .	. . .	54,681	686	38,234	47,280	78,086	12,032	2,272	568	. . .
Consolidated Working Fund-gross outlay	62	3,088	2,260	10,515	11,395	6,185	56,000	3,377	2,070	2,381	2,718	. . .

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[1] Estimated.

[2] Title VI for education of the handicapped is not included here but is included under "Educational improvement for the handicapped." "Nutrition and health" included in "Research and development."

[3] Includes some elementary-secondary school expenditures from expired accounts.

[4] Includes title X, National Defense Education Act (NDEA).

[5] Some bilingual education fund also in "Emergency School Aid."

[6] Amounts for college library improvement are included under "Research and development."

[7] Includes State incentive grants.

[8] Includes veterans' cost of instruction payments to institutions of higher education.

[9] Includes State administration, continuing education project and fellowships for public service, legal profession, and other purposes, and amounts for acquisition and cataloging by the Library of Congress.

[10] Amounts for research are included under "Research and development."

[11] Includes funds for teacher training institutes (after 1969) provided under the National Foundation on the Arts and the Humanities Act and NDEA.

[12] Includes library demonstrations.

[13] Includes assistance under the National Foundation on the Arts and the Humanities Act.

[14] Includes Ellender fellowships.

[15] Includes Fullbright-Hays Act.

[16] Includes transfers to the National Institute of Education. Program detail not available.

[17] Includes amounts for adult vocational education.

[18] Amounts for this activity supported with transferred funds prior to 1969.

[19] Includes Civil Rights.

[20] Amounts listed below are not included in the Office of Education expenditure totals.

[21] Includes amounts for Area Redevelopment Act.

[22] Includes Educational Exchange.

[23] Funds transferred prior to 1967 are included in the Consolidated Working Fund. Since 1972, also includes Development Facilities, Economic Development Assistance, Department of Commerce; Regional Development Programs, Regional Action, Planning Commission; and Military Construction, Army.

[24] Some OEO transfers also included in the Consolidated Working Fund.

SOURCE: Compiled by the National Center for Education Statistics and the Office of Administration, Office of Education, U.S. Department of Health, Education, and Welfare.